HE
18.5
.A39
no.
DOT-
TST-
77-72
c.2

77-72

VALUE CAPTURE AND JOINT DEVELOPMENT APPLICATIONS:

Dept. of Transportation
OCT 1 9 1977

FINAL REPORT
JANUARY 1977

UNDER CONTRACT: DOT-OS-40007

Document is available to the U. S. Public
through the National Technical Information Service
Springfield, Virginia 22161

prepared for
Department of Transportation
Office of the Secretary
Office of University Research
Washington, D.C. 20590

NOTICE

This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof.

HE
18.5
.A39
no.
DOT-
TST-
77-72
c.2

U.S. Dept. of Transportation.
Report no. DOT-TST-77-72.

Technical Report Documentation Page

1. Report No. DOT-TST-77-72	2. Government Accession No.	3. Recipient's Cotolog No.
4. Title ond Subtitle VALUE CAPTURE AND JOINT DEVELOPMENT APPLICATIONS; Chicago/Louisville/Los Angeles		5. Report Date January 1977
		6. Performing Orgonizotion Code
7. Author(s) Carl P. Sharpe, et al		8. Performing Orgonizotion Report No.
9. Performing Orgonizotion Nome and Address Rice Center for Community Design and Research, Rice University, 1929 Allen Parkway, Houston, Texas 77019		10. Work Unit No. (TRAIS)
		11. Contract or Grant No. DOT-OS-40007
12. Sponsoring Agency Nome ond Address Office of University Research, Office of the Secretary, U. S. Department of Transportation, Washington, D. C. 20590		13. Type of Report ond Period Covered Final Report
		14. Sponsoring Agency Code OST/TST-60

15. Supplementory Notes

OST Technical Monitor: Byron Nupp, TPI-11.1

16. Abstroct

This report on Value Capture Policy is related to earlier work conducted by Rice Center. This study presents highlights of findings, devines how value capture can be implemented, describes important legal, financial and community design issues associated with the value capture concept and summarizes the conclusions reached and the methodology employed in this research.

In recognition of the diversity of legal, political, economic and physical situations in which mass transit development has and will occur; Value Capture Policy has been studied and is herein presented as an ARRAY OF OPTIONS. Central to Value Capture is a set of TECHNIQUES which can be applied by a transit or community development entity. Each TECHNIQUE is designed to enable the entity to ENHANCE & CAPTURE financial and/or community design benefits related to transit system implementation.

PART 1 INTRODUCTION
PART 2 ISSUES
PART 3 EVALUATION AND FINDINGS
PART 4 METHODOLOGICAL NOTES
PART 5 LOS ANGELES CASE STUDY
PART 6 LOUISVILLE CASE STUDY
PART 7 CHICAGO CASE STUDY

Dept. of Transportation
OCT 1 9 1977
Library

17. Key Words Value Capture Policy, financial, legal, community enchancement, Options Transportation	18. Distribution Statement Document is available to the U. S. Public through the National Technical Information Service, Springfield, Virginia 22161

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Poges	22. Price
UNCLASSIFIED	UNCLASSIFIED		

Form DOT F 1700.7 (8-72) Reproduction of completed page outhorized

Credits

This work was completed by the Rice Center for Community Design + Research, Office Suite 400, 1929 Allen Parkway, Houston, Texas, 77019, Telephone (713) 529-7672. This work was prepared under contract number PUR-2-30667 with the University Research Program, the U. S. Department of Transportation, Washington, D. C.

PROJECT STAFF

Carl P. Sharpe, Project Director
Robert M. Eury, Project Manager

Robert W. Bainbridge, Co-Principal Investigator/Community Design
David L. Callies, Co-Principal Investigator/Legal
Russell P. Wynings, Jr., Co-Principal Investigator/Finance

Richard V. Butler
James Dietzmann
Honora C. Ellison
Donald Jones
Lucien leGrange
Therese C. Lucas
Donald L. Williams

SPECIAL ACKNOWLEDGMENTS

David L. Callies of Ross, Hardies, O'Keefe, Babcock & Parsons
Karen Hollahan of Ross, Hardies, O'Keefe, Babcock & Parsons
Richard V. Butler for contributions to final report
Kathryn Kreger, Vicky Wendt, Paulette Woods, and Nancy Sulkowski for report preparation and editing.

Our special gratitude to the individuals and institutions who graciously cooperated in this research effort in each of the case study cities. They are listed for Los Angeles (p. 49), Louisville (p. 103), and Chicago (p. 160).

Donald L. Williams,
Executive Director

Abstract

The research described herein looks at application of Value Capture and joint development concepts in the selected cities of Los Angeles, Louisville, and Chicago. Although it was found that these concepts were not new, some had not been considered or pursued as a viable source of funding and development co-ordination for urban mass transportation.

The initial chapters of this report outline key issues which have been identified as problems and opportunities in the application of Value Capture. Techniques which have been found to be most viable in the application of Value Capture have also been defined and discussed across financial, legal and community design issues. These include ad valorem taxes, special benefits taxation, tax increment financing, real property development and holding for income purposes, real property development and sale, land sales, and equity participation in any type of real property development.

This report provides a tenative conclusion that in each city, there are techniques which can be successfully applied: however, in each case further research and testing is required before a determination can be made that a technique is, infact, doable.

For Los Angeles, Louisville, and Chicago, legal and financial issues are presented independently; then, through the use of case studies of proposed transit station, alternatives for transit related developments are evaluated in terms of community design impacts and financial performance. Thus, illustrations of Value Capture in application are provided in a variety of community development contexts.

Table of Contents

		Page
PART 1	INTRODUCTION	
1a	Background and Definition of Value Capture Policy	1
1b	Highlights of Findings	1
1c	Methodology	9
PART 2	ISSUES	
2a	Land Value and Development Potential	11
2b	Land Assemblage Requirements	11
2c	Growth Impact - Net vs. Redistribution	12
2d	Institutional Arrangement Requirements	12
2e	Financial Issues	12
2f	Community Design Issues	13
2g	Public Participation Optimistic Caution	14
2h	The Young Amendment	14
PART 3	EVALUATION AND FINDINGS	
3a	Legal Evaluation	18
3b	Financial Evaluation	20
3c	Community Design Parameters	27
PART 4	METHODOLOGICAL NOTES	
4a	Legal	33
4b	Financial	34
4c	Community Design	40
	Notes	44
PART 5	LOS ANGELES CASE STUDY	
5a	Introduction	47
5b	Legal Findings	50
5c	Financial Findings	62
5d	Community Design Findings	73
	Notes	98
PART 6	LOUISVILLE CASE STUDY	
6a	Introduction	101
6b	Legal Findings	104
6c	Financial Findings	110
6d	Community Design Findings	125
	Notes	156
PART 7	CHICAGO CASE STUDY	
7a	Introduction	158
7b	Legal Findings	160
7c	Financial Findings	167
7d	Community Design Findings	177
	Notes	196

Table of Figures

Figure 1/1	Wilshire and Western Avenues - Alternative #1 in Los Angeles	4
Figure 1/2	University of Southern California and Exposition Park - Alternative #3	4
Figure 1/3	Fairbanks Court and Grand Avenue - Alternative #1	4
Figure 1/4	Watterson Expressway and Southern Parkway - Alternative #1	5
Figure 1/5	Buechel Bank Road at Appliance Park - Alternative #1	5
Figure 1/6	Second and Jefferson Streets - Alternative #2	5
Figure 1/7	Stop Applications: Summary and Comparison of Investment Analyses Results	8
Figure 1/8	Stop Applications: Summary and Comparison of Investment Analyses Results	26
Figure 3/2	Buechel Bank Road, Louisville	28
Figure 3/3	Watterson Expressway and Southern Parkway, Louisville	29
Figure 3/4	Monroe Street, Chicago	29
Figure 3/5	Wilshire Boulevard and Western Avenue, Los Angeles	30
Figure 3/6	Fairbanks and Grand Avenue, Chicago	30
Figure 3/7	Valley Station Road, Louisville	30
Figure 3/8	103rd Street and Graham, Los Angeles	32

Figure 4/1 Land Use Development Assumptions 36

Figure 4/2 Impact Assumptions 37

Figure 4/3 Develop/Hold: Typical Output 38

Figure 4/4 Land Lease: Typical Output 39

Figure 4/5 Taxation: Typical Output 39

Figure 4/6 Cash Flow Summary: Typical Output 40

Figure 4/7 Community Enhancement Evaluation Process 42

Figure 4/8 Community Impact Parameters 43

Figure 5/1 Transit System Route Map, Los Angeles 48

Figure 5/2 Summary and Comparison - Investment Analysis Results 71

Figure 5/3 Inflation Effects - Investment Analysis Results 72

Figure 5/4 Stream of Returns-Investment Analysis Results 72

Figure 5/5 Watts Stop Context 74

Figure 5/6 103rd and Graham 75

Figure 5/7 Alternative #1 Aerial View 75

Figure 5/8 Alternative #1 Plan 76

Figure 5/9 Alternative #1 Development Components 76

Figure 5/10 Alternative #2 Plan 76

Figure 5/11 Alternative #2 Aerial View 77

Figure 5/12 Community Quality Indicators 77

Figure 5/13 USC/Exposition Park Stop Context 80

Figure 5/14 Intersection of Exposition Boulevard and Figueroa 80

Figure 5/15 Alternative #1 Aerial View 81

Figure 5/16 Alternative #1 Plan 82

Figure 5/17 Alternative #2 Plan 82

Figure 5/18 Alternative #2 Aerial View 83

Figure 5/19 Alternative #3 Plan 83

Figure 5/20 Community Quality Indicators - USC/Exposition Park 84

Figure 5/21 Wilshire Boulevard Looking East 89

Figure 5/22 Wilshire and Western Stop Context 89

Figure 5/23 Wilshire Boulevard Looking West 90

Figure 5/24 Alternative #1 Aerial View 90

Figure 5/25 Alternative #1 Development Components 90

Figure 5/26 Alternative #1 Plan 91

Figure 5/27 Alternative #2 Plan 91

Figure 5/28 Alternative #2 Development Components 91

Figure 5/29 Alternative #3 Aerial View 92

Figure 5/30 Alternative #3 Plan 92

Figure 5/31 Community Quality Indicators 93

Figure 6/1 Louisville Assumed Transit System 102

Figure 6/2 Summary and Comparison - Investment Analysis Results 122

Figure 6/3 Inflation Effects - Investment Analysis Results 123

Figure 6/4 Stream of Returns - Investment Analysis Results 124

Figure 6/5 Buechel/G.E.Stop Context 126

Figure 6/6 Buechel Bank Road Looking North 126

Figure 6/7 Plant Entrance 127

Figure 6/8 Alternative #1 Aerial View 127

Figure 6/9 Alternative #1 Plan 128

Figure 6/10 Alternative #2 Aerial View 128

Figure 6/11 Alternative #2 Plan 129

Figure 6/12 Community Impact Indicators 130

Figure 6/13 Valley Station - Stop Context 133

Figure 6/14 Railroad R.O.W. Looking North 133

Figure 6/15 Valley Station Road Looking West 133

Figure 6/16 Alternative #1 Aerial View 134

Figure 6/17 Alternative #1 Plan 134

Figure 6/18 Alternative #2 Aerial View 135

Figure 6/19 Alternative #2 Plan 135

Figure 6/20 Community Impact Indicators 136

Figure 6/21 Watterson and Southern Stop Context 141

Figure 6/22 Southern Parkway Looking North 141

Figure 6/23 Southern Heights Avenue 141

Figure 6/24 Alternative #1 Aerial View 142

Figure 6/25 Alternative #1 Plan 142

Figure 6/26 Alternative #2 Aerial View 143

Figure 6/27 Alternative #2 Plan 143

Figure 6/28 Community Impact Indicators 144

Figure 6/29 Louisville CBD Stop Context 147

Figure 6/30 Jefferson Street Looking West 148

Figure 6/31 Alternative #1 Plan 149

Figure 6/32 Alternative #1 Aerial View 149

Figure 6/33 Alternative #2 Aerial View 150

Figure 6/34 Alternative #2 Plan 150

Figure 6/35 Community Impact Indicators 151

Figure 7/1 Chicago Transit Segments Assumed 159

Figure 7/2 Evanston Area 172

Figure 7/3 Summary and Comparison - Investment Analysis Results 175

Figure 7/4 Inflation Effects - Investment Analysis Results 176

Figure 7/5 Stream of Returns - Investment Analysis Results 177

Figure 7/6 Monroe Street Stop Context 179

Figure 7/7 Monroe Street at Wabash Street 179

Figure 7/8 Monroe Street at State Street 179

Figure 7/9 Monroe Street Aerial View 180

Figure 7/10 Typical Station Commercial Facility 180

Figure 7/11 Community Quality Indicators 181

Figure	7/12	Fairbanks and Grand Stop Context	183
Figure	7/13	Fairbanks Court Area	184
Figure	7/14	Fairbanks Court Looking South	184
Figure	7/15	Alternative #1 Plan	185
Figure	7/16	Alternative #2 Plan	186
Figure	7/17	Community Impact Indicators	187
Figure	7/18	Evanston Stop Context	190
Figure	7/19	Alternative #1 Plan	191
Figure	7/20	Alternative #1 Development Components	191
Figure	7/21	Alternative #1 Aerial View	191
Figure	7/22	Alternative #2 Plan	192
Figure	7/23	Alternative #2 Aerial View	192
Figure	7/24	Alternative #2 Development Components	192
Figure	7/25	Community Impact Indicators	193

Part 1 Introduction

Synopsis

This PART introduces the reader to WHAT Value Capture Policy is, relates this work to earlier work conducted by Rice Center, presents HIGHLIGHTS OF FINDINGS, defines HOW Value Capture can be implemented, describes important legal, financial and community design issues associated with the Value Capture concept and summarizes the conclusions reached and the methodology employed in this research.

1a Background and Definition of Value Capture Policy

This effort has evolved from a continuing frustration experienced by many planners, public officials and developers over two recurring situations associated with the challenges of mass transit implementation.

1) CITIES GO BEGGING FOR CAPITAL (typically to Washington for the majority and local sources for match) to build, and operating income to service and maintain transit facilities.

2) This "search for funds" takes place despite many land use/transit development opportunities in connection with massive public transit investment. These opportunities which include the potential for generating new sources for funds and deriving other community design benefits MOST OFTEN GO UNEXPLORED AND UNREALIZED.

It is arguable that integrating mass transit and land use projects can yield an opportunity to "create wealth" both financially and in terms of other local community benefits. Given the proper set of circumstances, it is possible for both public and private participants to CAPTURE THESE VALUES. Value Capture Policy is a means whereby the land adjacent to transportation facilities (in this case, transit stops) is purchased, managed or controlled in order for the public to share in potential financial and community design benefits from the facilities not otherwise possible.

This report represents completion of the second phase of the Rice Center's research of Value Capture Policy through the Department of Transportation's Program of University Research.

In the previous Phase I Value Capture Policy Research, Houston, Texas, and its proposed rapid transit system was utilized as a situation within which to define and explore the problems and opportunities associated with Value Capture.

In this Phase II Research key issues developed in Phase I are applied in hypothetical transit development situations for existing or proposed transit systems in the cities of Los Angeles, Chicago, and Louisville. These cities were selected because they provide occasions to illustrate legal, financial and community design problems and opportunities across diverse settings in search of contrast and concensus.

1b Highlights of Findings

In recognition of the diversity of legal, political, economic and physical situations in which mass transit development has and will occur; Value Capture Policy has been studied and is herein presented as an ARRAY OF OPTIONS. Central to Value Capture is a set of TECHNIQUES which can be applied by a transit or community development entity. Each TECHNIQUE is designed to enable the entity to ENHANCE & CAPTURE financial and/or community design benefits related to transit system implementation.

This Highlights of Findings section will first present these TECHNIQUES and then discuss key legal, financial and community design problems and opportunities associated with Value Capture.

LEADING TECHNIQUES FOR VALUE CAPTURE

Ad Valorem Taxation: The transit or development entity would tax the assessed market-value of land and improvements within the entity's taxing jursidiction or the city served by the transit system.

Special District Taxation: An ad valorem tax would be levied by the entity on a district in the city adjacent to a transit station facility with boundaries set such that the area included is that which receives special benefits from the facility. The en-

tity would, through the separate tax on the assessed valuation of the market value of the land and its improvements, receive some of the financial benefits it created with its facilities.

Marginal Value-Incremental Taxation: This instrument also uses a district; however, no new taxes are introduced. The entity receives, per agreement, all or part of the ad valorem tax revenues on the increment or net difference between the assessed valuation on the market value of the land and its improvements at some future date and the assessed valuation "frozen" at a point prior to the construction of the transit improvements.

Develop/Hold-Real Property: The entity constructs transit related facilities around the transit stop and leases or rents said facilities. Public participation in the development of facilities enhances the potential for community design inputs while also generating revenue through lease and rental agreements.

Develop/Sell-Real Property: The entity acquires land fee simple and develops transit related improvements and facilities thereon. At completion land and facilities are sold. As in the Develop/Hold technique the public here participates in the community development process yielding potential benefits unique to this and the Develop/Hold or Participation techniques.

Hold/Sell-Real Property: Fee simple interest and other development rights (air or subsurface) of transit related land parcels are acquired by the entity. Then at a future date when the development of these parcels meets appropriate public purposes the rights or land is sold subject to specific use conditions.

Lease-Real Property: After acquiring land related to the transit facility, the entity enters into long term ground or air/subsurface rights leases of the land or related development rights again subject to specific development programs in terms of community design and public finance benefits.

Participation-Real Property: Interest in transit related land parcels or development rights are ceded to other private or public parties for development around stop locations. Under some circumstances the transit or development entity may participate in a portion of the income stream thus produced.

PROBLEMS AND OPPORTUNITIES FOR VALUE CAPTURE APPLICATION - OVERVIEW

In a nut shell WE FIND NO SUBSTANTIAL BARRIERS TO VALUE CAPTURE IN ANY OF THE FOUR STATES (Texas, California, Illinois and Kentucky) IN WHICH WE HAVE WORKED. No substantial barriers means no situation requiring inordinate effort beyond the normal legislative, political, financial and planning process associated with transit implementation per se.

Value Capture offers clear opportunities for community design benefits available through public participation in land development related to mass transit implementation. Similarly public finance benefits are realizable through the special forms of taxation and/or development participation defined earlier. Any application, however, must face problems and uncertainties associated with any new policy and/or the transit and land development process. While some historical applications of Value Capture have sustained substantial success, some situations may be so fraught with such problems and constraints as to make Value Capture counterproductive to either community design or public finance benefits.

The following represents an overview of FINDINGS and associated problems and opportunities across the areas of LAW, COMMUNITY DESIGN and PUBLIC FINANCE.

LEGAL FINDINGS

Fundamental to Value Capture is a series of legal concepts. These include excess or supplemental condemnation, monetary transfers, intergovernmental cooperation of various sorts, and the dealing in air or subsurface rights. These legal concepts were vigorously pursued in questioning key legal professionals (public and private) and reviewing pertinent statutes in Los Angeles, Chicago, and Louisville during this research.

The findings herein presented are much the same as those of the first phase, in that given well chosen strategies embodied in concept plans, VALUE CAPTURE WILL NOT ENCOUNTER MAJOR LEGAL OBSTACLES in the three jurisdictions focal to this work. Fundamental to this, however, is the need to seek appropriate statutory authority as well as preparation of clearly legally defensible plans for community design and public finance. Each instance of application must,

therefore, be seen and judged upon its own set of benefits and liabilities.

The following discussion focuses on major problems and opportunities associated with key tenants of legal concerns regarding Value Capture.

Public Purpose: Given statutory declaration of the public purpose on which the power to exercise eminent domain is based, the courts in Chicago, Los Angeles, and Louisville have permitted a broad range of development projects including those with extensive private participation in the development of land condemned by public agencies. With this rather broad definition, the transit or development entity's use of supplemental condemnation may find affirmation from the courts for a range of Value Capture projects undertaken.

Supplemental Condemnation: Based on the courts construction of public purpose in each of the jurisdictions as well as general comments that many so called "supplemental condemnation" cases were viewed as a valid use of the power of eminent domain for public purpose by the transit or community development authority so long as a development plan was in evidence, it can be said that some measure of supplemental condemnation is legal in the cities of Chicago, Louisville, and Los Angeles. However, the use to which this land is put may be problematic. Public bodies were generally expected by those interviewed to put lands taken to producing temporary revenues, while schemes for long range income production may have more problems in meeting the tests of public purpose related to taking the land in the first place.

Monetary Transfers: Work here focused on special benefit assessments as one technique for Value Capture and our finding that both California and Kentucky have statutes permitting agencies to employ such techniques. Yet in California the law has not found application in any development project.
In contrast, considerable attention in legal and public finance arenas in California and Kentucky is being given to tax increment financing. California is successfully using this strategy, while in Kentucky a test case on the statute is proceeding at the present time.

Chicago has chosen to finance its central city transit improvements through the use of none of the above, but rather through ordinary ad valorem taxation administered by its transit development district within a district comprised of the central portion of the city.

Using Air and Subsurface Rights: This requires no excess or supplemental condemnation, only the right of a transit authority to deal in transit related real properties for income production. Chicago has a history of this. There is general agreement that transit entities generally have a responsibility to put their land resources to productive uses. Examples of private uses on public properties were found in all jurisdictions.

Intergovernmental Cooperation: This in general is a legal means of supporting Value Capture. Those consulted in this research pointed out that the right to cooperate between agencies might not induce them to do so. Clearly, the need for intergovernmental cooperation results from an opportunity resulting from the objectives of a specific Value Capture application.

COMMUNITY DESIGN FINDINGS

There is little doubt, on the face of it, that the prospects for locating, programming and designing transit facilities and adjacent development simultaneously offers an opportunity for a host of community design benefits unobtainable otherwise. If nothing else, the absurd abuses of neighborhoods which are torn apart when they should have been preserved, of gas stations adjacent to transit stops, of transit stops which are little more than holes in the ground, of fences, streets, and service alleys posing barriers to transit customers as well as a litany of similar abuses can be avoided in many cases and minimized in all.

On the other hand Community Design issues are notoriously difficult to quantify and generalize. Utilizing a series of transit segments and stops along the transit system proposals for Los Angeles, Louisville, and Chicago; it has been possible to illustrate varied problems and opportunities for community design as a result of public participation in the transit related land development process. Opportunities include improving mobility, diminishing negative environmental impact, reducing congestion, providing services and employment and increasing diversity in housing and residential development. Problems include relocation and social impacts associated with changes in land uses from low intensity to high intensity or from the introduction of facilities oriented to

different social groups than prior to transit development. It is important to note that what may be a benefit to one constituency is often seen as a disaster to others. The concept of public benefits is never clear. Therefore, stop by stop specification of situation and community design issues must remain the center of community design findings.

The following will serve to illustrate examples of Community Design potentials revealed in Chicago, Los Angeles and Louisville.

Wilshire and Western Avenues - Alternative #1 in Los Angeles contains approximately 650,000 square feet of mid-high rise office, a community shopping center, structured parking, and the transit stop itself. It has a strong differential effect on different constituencies. Residents are expected to be more negatively impacted on social and environmental issues while employees and visitors are more positively affected on social, access and mobility issues.

Fig 1/1

University of Southern California and Exposition Park - Alternative #3 proposes a local community college, local commercial, the transit stop and parking for this mixed institutional, residential and industrial community in Los Angeles. This stop related development project offers urban design opportunities by integrating mass transit into an existing fringe area and providing connections with two major institutions. Development of public/institutional facilities provides lower financial returns but greater benefits to local residents than other options. The existing marginal, underdeveloped character of the area allows benefits to be realized with low social and environmental costs.

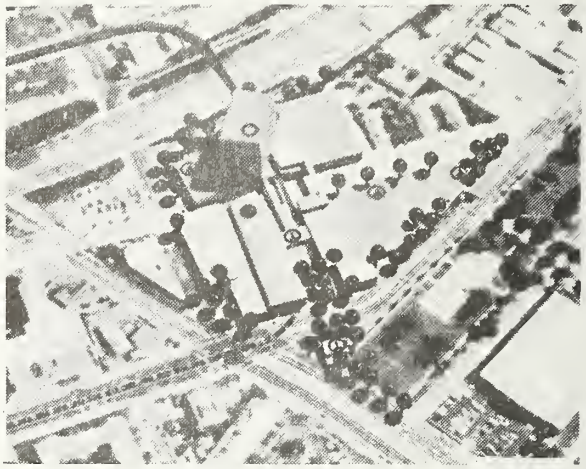


Fig 1/2

Fairbanks Court and Grand Avenue - Alternative #1 to the north of the "Loop" in Chicago provides a speculative development situation where the mid and high rise apartments, regional commercial, and health related office facilities are proposed along with the stop itself. Because the number of current resident and other user populations in the area is low, key benefits are related in large part to new groups who will benefit from access and mobility, new activity patterns, and upgrading of the environment.

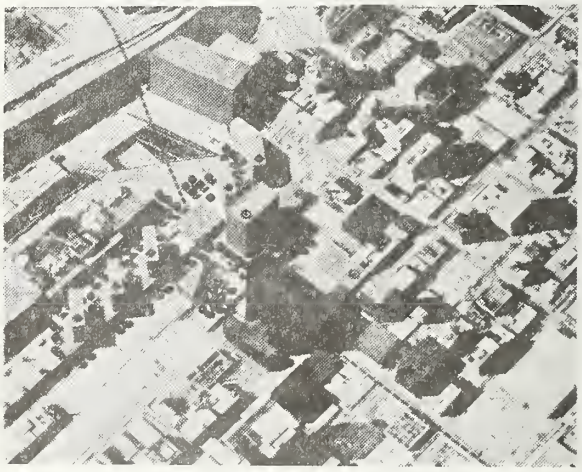


Fig 1/3

Watterson Expressway and Southern Parkway - Alternative #1 locates a development project in an older, well kept residential community which is traversed by a circumferential expressway for which widening has been proposed. The development shown, taking only parcels adjacent to the expressway, provides for neighborhood commercial, low rise office, parking, and transit stop facilities. Though the proposal illustrated minimizes the taking of land, relocation and disruption of activity patterns, the key issue remains whether any development related to the stop will provide a net benefit or be supported by area residents. Public participation may best be used to prevent, rather than encourage, development in this example.

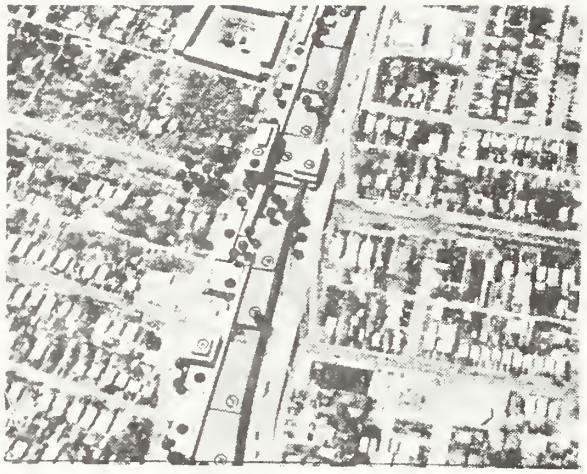


Fig 1/4

Buechel Bank Road at Appliance Park - Alternative #1 assumes the construction of an exclusive busway route from the CBD area of Louisville to the General Electric Company's Appliance Park, Louisville's largest employer, with 20,000 employees. The parking, neighborhood and stop facilities are illustrated. Dislocations of existing social activities are minimal, and local residents as well as plant employees are expected to benefit from new facility options and infrastructure improvements as well as improved access and appeal of the transit system. Public participation would have a major role in balancing constituency goals, and providing regional perspective.

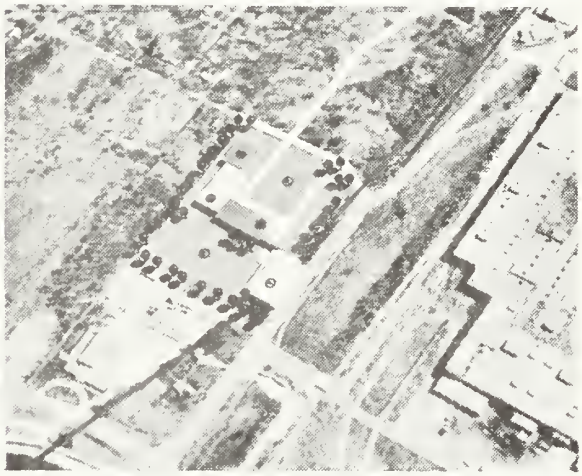


Fig 1/5

Second and Jefferson Streets - Alternative #2 proposes development of a transit station, parking, related commercial and office facilities in the CBD area of Louisville. Parking and other facilities will be extremely supportive of the public purpose of the major convention facility currently under construction in the block immediately adjacent, and in a larger sense to overall downtown growth and development. Financial and city-wide benefits here are very good, but they must be weighed against the relocation costs born by dislocated transient, low income residents who may have extreme difficulty in finding comparable housing.

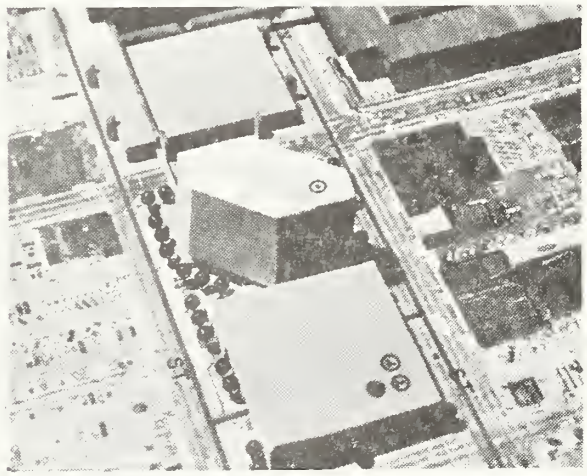


Fig 1/6

FINANCIAL FINDINGS

Value Capture and its success is directly related to the success of the transit system itself. If the facility is needed and properly planned, then the areas it serves will receive a substantial boost in development potential. Although of primary importance, this development potential is not limited solely to changes in land value, but may be enhanced further through cooperative public and private efforts. As Value Capture represents 8 DIFFERENT TECHNIQUES, including taxing and participation options, and as investment opportunities vary substantially as a function of specific projects, SIMPLE BOTTOM LINE CALCULATIONS ARE APT TO BE AS MISLEADING AS UNINFORMATIVE.

On the other hand, ultimately the question of WHO MAKES WHAT, WHEN, WHERE, AND WHY arises. Issues associated with this question include: income stream, sources and uses of funds, and specific characteristics associated with each Value Capture technique. Findings concerning these issues are presented below.

Income Stream: Of major concern in Value Capture is the timing of costs and returns. In general, real property development techniques (Develop/Hold, Develop/Sell, Hold/Sell, Lease and Participation) are plagued with front end difficulties which compete with the need for money to build transit. Tax techniques (Ad Valorem, Special District and Marginal Value) perform more positively in this light.

Legal constraints upon the transit or development entity in using its properties may have an affect on when the entity can consider putting developments or land on the market. The market itself is a key factor in determining income stream.

The example applications presented later in this report show wide variations in income stream. Some with substantial front end capital requirements, some with large early returns and some show net losses. Cash flows through the life of the project are presented as part of the financial analysis for each stop application.

Sources and Uses of Funds: A key concern is how to initially fund Value Capture. As investment decisions are considered the transit system itself and transit related development often vie for the same funds. This is because the bonding capacity of the entity remains fixed in the face of competing demands. Bond Issues form a favorable source, yet revenues to retire these bonds may or may not, depending on the case in point, be derived solely from Value Capture.

Federal sources of funds present the problem of competing investment decisions, restrictions upon sources and uses of funds, and considerations about the flow of investment funds as well as returns over time. The Young Amendment to the Urban Mass Transportation Act of 1964 may represent a new federal source for joint development financing yet its uses and availability have yet to be defined.

Investment Opportunities: This research has identified eight Value Capture techniques for enhancing and/or deriving financial and/or community design benefits from transit related development. The techniques provide great diversity to the transit or development entity considering such issues as risk, liquidity, manageability, and overall yield in making investment decisions.

The following paragraphs summarize these issues for each Value Capture Technique:

Ad Valorem Taxation: Easily manageable, provides immediate returns without tying up capital, presents minimum of risk, yield varies with rate.

Special Benefits Taxation: Legally possible to employ in Kentucky and California, returns may be tied closely to debt servicing for specific improvements, provides little or no risk, compared to ad valorem taxes this district approach does not have as broad a geographic base, cost for management would include those of assessment and collection (as in the case of other tax techniques).

Tax Increments-Marginal Value Taxation: Currently legal in California and Kentucky, risk involved (as in the case of other development related techniques) is tied to the market place, minimum capital investment is needed, management problems include administering the tax in terms of added value increments as well as collection, use of returns are restricted to debt servicing improvements made in the taxing district.

Develop/Hold-Real Property: Offers substantial return potential, poses problems in terms of risk, returns are not immediate as in the taxes and as such do not come when

needed most by the transit entity, initial land acquisition and development program are keyed to the entity's legal ability to acquire and develop stop related land.

Develop/Sell-Real Property: Similar to develop/hold in the land acquisition and development requirements, must have the authority to divest of holdings, returns are lumpy and generally would not be available early in the transit project, potential returns are closely tied to the degree of risk in each project.

Hold/Sell-Real Property: In all jurisdictions investigated transit entities can divest of interest in surplus properties, return is linked to the amount of land initially acquired, risk involved stems from the illiquidity of a parcel due to land market fluctuations, does have the potential for providing short term returns while requiring significant initial investment.

Lease-Real Property: Offers a manageable long term source of income, reasonable risk, magnitude of returns is closely tied to initial acquisition as well as the entity's ability to dispose of development rights, requires front end investment.

Participation-Real Property: Returns are keyed to the ability of the entity to do more in concert with other private or public parties, some of the problems of liquidity, risk and management may be shifted to others, unlikely to provide more recapture than other land development schemes, yet this may provide new opportunities for investment not otherwise possible, little potential for providing front end returns.

In comparing these techniques it is important to note that more than one can be employed at a time such as tax increment financing and participation in real property.

BOTTOM LINE

As verified in detail in later parts of this report and as one could reasonably expect, there is a WIDE VARIATION IN FINANCIAL RESULTS dependent in large part upon the Value Capture Techniques utilized to recapture revenues and the land development programs associated with each stop. The context for these financial results must be presented as a prerequisite to evaluating their significance. These are:

All stops and development programs are completely hypothetical.

All assumptions, financial parameters and related inputs are reflective of the market and land development situation in each area of each city as best could be determined.

Local resources were utilized, where practical, to verify assumptions and conclusions concerning financial parameters, issues, and procedures.

The proforma analysis program employed provides a consistent method for computing comparative results for each stop alternative.

No implication is intended that stops and their programs can be replicated at other stops along a transit system. Each stop and program situation must be considered unique.

Because financial returns for techniques vary substantially as a function of specific transit development situations, the bottom line or net returns for Value Capture application in each city is both extremely difficult to calculate and unwise to approximate with what would clearly be a guess. Moreover, it is extremely difficult to select the best measure of the yield for Value Capture since such indices as rates of return may suit development techniques well but are absurd in the case of taxes.

Figure 1-7 presents a summary of results for Value Capture applications in transit stop development situations in Louisville, Los Angeles and Chicago. The rows of this figure represent 10 different transit stop situations; 3 in Los Angeles, 3 in Chicago and 4 in Louisville. Each stop has from 2 to 3 different land development projects associated with it bringing the total Value Capture Applications illustrated to 24. The columns present a description of land use program elements, the Value Capture technique assumed, the cost of the transit stop and related development attributable to the transit or development entity, cash flow accumulated over a 25 year period, construction costs for the transit segment related to the particular stop measured as 1/2 the distance to both adjacent stops, and finally the percentage of the transit segment costs defrayed by the net accumulated cash from the development utilizing the Value Capture technique defined.

As can be seen several Value Capture Applications defray over 500% of the transit segment cost, many defray over 100%, many

VALUE CAPTURE APPLICATION			VALUE CAPTURE RESULTS		TRANSIT SYSTEM	COSTS DEFRAYED
STOP SITUATION	DEVELOPMENT PROGRAM	VALUE CAPTURE TECHNIQUE APPLIED	Development Capital Cost (x $1,000)	Net Accumulated Cash from Devel. (x $1,000)	Transit Segment Cost Estimate (x $1,000)	% Defrayed w/Net Acc. Cash (%)
Los Angeles - Watts I (103 @ Graham Sts.)	Stop, Parking, Commercial	Develop/Hold	1,650	2,490	7,900	31.5
Los Angeles - Watts II	Stop, Parking	Develop/Hold	680	-410	7,900	-5.2
Los Angeles - Expo I (Exposition Blvd. @ Figueroa)	Stop, Parking, Commercial, Office, Hotel	Develop/Hold, Land Lease	17,310	115,380	35,750	322.7
Los Angeles - Expo II	Stop, Parking, Commercial, Office, Hotel	Develop/Hold, Increment Tax Financing	1,590	30,490	35,750	85.3
Los Angeles - Expo III	Stop, Parking, Commercial, Educational Facil.	Develop/Hold	20,300	17,910	35,750	50.1
Los Angeles - Wilsh I (Wilshire Blvd. @ Western)	Stop, Parking, Commercial, Office	Participation, (10% partner)	51,980	13,260	35,200	37.7
Los Angeles - Wilsh II	Stop, Parking, Office, Commercial	Develop/Hold, Increment Tax Financing, Air Rights Lease	3,640	50,740	35,200	144.1
Los Angeles - Wilsh III	Stop, Parking, Commercial, Housing, Office	Develop/Hold, Land Lease	5,090	107,360	35,200	305.0
Chicago - Monroe I (Monroe @ Wells)	Stop, Commercial	Develop/Hold	8,150	-5,600	33,600	-16.6
Chicago - Monroe II	Stop, Commercial	Develop/Hold	6,200	-9,310	33,600	-27.7
Chicago - Grand I (Fairbanks Ct. @ Grand Ave.)	Stop, Parking, Office, Commercial Health Fac., Housing	Develop/Hold, Land Lease	17,510	148,270	35,230	420.8
Chicago - Grand II	Stop, Parking, Commercial, Office Health Fac., Housing	Develop/Hold, Land Lease, Ad Valorem Taxation	42,440	88,700	35,230	251.8
Chicago - Evanston I	Stop, Parking, Commercial	Participation (10% Partner)	4,720	1,470	-NC-	-NC-
Chicago - Evanston II	Stop, Parking, Commercial, Housing	Participation (20% Partner)	21,920	12,670	-NC-	-NC-
Louisville - G.E. I (Buechel Bank Road)	Stop, Parking, Commercial	Develop/Hold	2,730	4,320	1,700	254.2
Louisville - G.E. II	Stop, Parking, Commercial, Office, Housing	Develop/Hold, Land Lease	15,390	4,520	1,700	265.7
Louisville - Valley I (Valley Station Road)	Stop, Parking, Commercial, Office	Develop/Hold	8,560	7,220	800	902.4
Louisville - Valley II	Stop, Parking, Commercial	Develop/Hold, Land Sale	2,390	4,350	800	543.9
Louisville - Valley III	Stop, Parking	Develop/Hold	365	-12	800	-1.5
Louisville - Watterson I (Watterson XWay @ Southern Pkway.)	Stop, Parking, Commercial, Office	Develop/Hold, Land Lease	5,760	730	1,350	53.9
Louisville - Watterson II	Stop, Parking, Commercial, Office	Develop/Hold	8,760	1,930	1,350	142.9
Louisville - CBD I (2nd and Liberty Sts.)	Stop, Parking, Commercial	Develop/Hold	3,470	3,290	500	657.6
Louisville - CBD II	Stop, Parking, Commercial, Office	Develop/Hold, Land Lease	2,510	6,230	500	1245.6
Louisville - CBD III	Stop, Parking, Commercial, Office	Develop/Hold, Increment Tax Financing	2,150	7,620	500	1524.4

STOP APPLICATIONS: SUMMARY AND COMPARISON OF INVESTMENT ANALYSES RESULTS

NOTE: LAND/AIR RIGHTS LEASES CALCULATED BY LAND RESIDUAL TECHNIQUE

Fig 1/7

operate at well below 100% and some suffer significant financial failure. Mindful of the restrictions placed earlier on interpretation these results represent information a developer would typically use for preliminary investment evaluations. At this stage he would eliminate any financial failures from the options and proceed with those that look as though they would be most successful. In this light, it can be concluded that VALUE CAPTURE REPRESENTS A MEANS TO DEFRAY TRANSIT COSTS ASSOCIATED WITH IMPLEMENTING NEW TRANSIT SERVICES. FURTHER THAT THE DEGREE OF VALUE CAPTURE SUCCESS OR FAILURE TO DEFRAY SUCH COSTS VARY SUBSTANTIALLY WITH SITUATION AND TECHNIQUE. Specific city by city stop by stop analysis is presented later in order to verify and support the calculations leading to the results presented in Figure 1-7.

1c Methodology

Major objectives addressed in this Phase II research focus on further understanding Value Capture through application to a diverse set of urban settings. After carefully addressing a rationale for selecting cities THIS RESEARCH HAS IDENTIFIED THE OPPORTUNITIES AND CONSTRAINTS FOR IMPLEMENTING VALUE CAPTURE in Los Angeles, Chicago, and Louisville.

Second, by example, this work has addressed in each city a range of development entities which can implement mass transit and/or apply Value Capture through a wide array of alternative techniques. These alternatives for capitalizing construction and realizing income through Value Capture were explored. At the same time these alternatives were critically reviewed in terms of resulting community design issues.

Major steps in conducting this research have included:

1) Coordinating teams within each city composed of both professionals and administrators acting as liason for each of the focus areas; legal, financial, and community design were set up.

2) Basic data was gathered in each city reflecting pertinent information on relevant legislation, policies, legal precedents, financing, proposed transit system plans, and general community planning issues.

3) Applicable legal, financial, and community design techniques from the Phase I Value Capture Research were further developed and applied in Phase II.

4) Important Value Capture problems and opportunities in application for each city were identified for alternate techniques.

5) Specific stop related situations were identified in each city and the consequences of applying relevant Value Capture techniques were tested across community design and financial parameters.

6) Based on the results of these tests overall evaluation of each technique within each city was illustrated and summarized.

7) Similar analysis followed comparing techniques and issues among cities.

8) Results of these analyses were presented to local coordinating teams in each city and are also presented in this report.

1d THIS RESEARCH REPORT/ORGANIZATION

PARTS 1, 2, and 3 of this report present different techniques for Value Capture, and a summary of findings, key issues and parameters for evaluating the efficacy of application in different urban environments. PARTS 1, 2, and 3 represent an EXECUTIVE SUMMARY. PARTS 4, 5, 6, and 7 offer an explanation of methods used and present detailed applications of Value Capture in Louisville, Los Angeles, and Chicago.

Part 2 Issues

Synopsis

This PART presents a series of POSTULATES which constitute underlying assumptions, points of common misunderstanding and/or bases for the methodology developed in this research. Issues to be PRESENTED IN BRIEF include the necessity for VALUE INCREASE before and after transit in adjacent land parcels, LAND ASSEMBLAGE requirements, COMMUNITY DESIGN ISSUES, assumptions and concerns regarding FINANCIAL BENEFITS, considerations of TIMING, geographical DISTRIBUTION and CITY WIDE DEVELOPMENT effects of transit implementation and the special role of Value Capture.

2a Land Values and Development Potential

The viability of development near a transit stop depends upon the increased desirability of the land resulting from the transit improvement. The amount by which a particular property adjacent to a transit stop will increase in value is related to:

1) The difference in accessibility of transit related land as compared to other land before and after transit.

2) The importance of increased accessibility in determining the potential for land development.

3) Availability of developable land on the market.

4) The demand for different types of development.

In practical terms a given property is worth what someone will pay for it. Willingness to pay for land varies as a function of PERCEIVED USEFULNESS and perceptions of usefulness are as varied as are developers and entrepreneurs. This situation leads to RISK and UNCERTAINTY which are a FUNDAMENTAL part of the land development process. While this uncertainty exists in any development project it is increased where development by type or situation represents a unique departure from business as usual. Joint transit and land use developments represent unique situations. In order to make the applications of Value Capture more concrete, the numerical results of this research rely upon fully developed EXAMPLE APPLICATIONS. Each application is predicated upon a specific location and set of circumstances, has a fully developed development program, and presents ALL ASSUMPTIONS used in pro forma calculations.

This report illustrates both SUCCESSES and FAILURES with equal clarity as a basis for deriving conclusions. Clearly increased land value is fundamental to tax recoupment techniques (presented earlier), plays a major role in the financial recoupment potential of development related techniques and adds great flexibility, but is not critical to some potential community design benefits.

2b Land Assemblage Requirements

Five of the Value Capture instruments introduced in PART I can be termed land acquisition and control techniques. That is, the transit or community development entity must be in direct (fee simple) control of transit stop related lands in order to effectively direct the programming, design and finances of transit related development. The legal element of this investigation has vigorously examined the use of excess or supplemental condemnation under several assumed theories for the purpose of enabling the entity to acquire adjacent land parcels.

With this in mind, it is important to note that either by normal acquisition proceedings where the development entity makes a successful offer for the fee on stop adjacent land parcels or, due to an unwillingness to sell to the entity, must use its power of eminent domain and proceeds in condemnation; the entity must obtain title to the land to be developed.

As detailed in the Evaluations and Findings PART 3 the circumstances under which the transit entity may acquire these adjacent parcels is directly related to the use to which it intends to put these lands both in terms of its legislative mandate and the general issues of public purpose, use and necessity.

2c Growth Impact—Net vs. Redistribution

While this research, and indeed the definition of Value Capture, focuses primarily upon land adjacent to transit improvements, key issues arise as to the impacts of transit per se and Value Capture in particular on a city or region wide basis. The growth attracted to transit as a natural part of city growth and change can be of three types. The first type is transit related development which chooses to locate near transit improvements as opposed to locating in another part of the same city or moves from another part of the same city to the transit related location. In this instance growth attributable to the transit system represents a redistribution within and not a net gain to the particular city. The second type of growth represents land uses attracted to the city primarily due to the transit and related land development advantages therein and chooses a location from amongst several alternative cities or states. This represents a net gain to the city but a redistribution on a state or national level depending on the particular circumstances.

The third type of growth attracted to transit can be represented by types of development that might not otherwise exist such as high rise housing or which would not normally receive transit location priority such as public services, cultural facilities and the like. This type of growth represents a redistribution in both types of use and/or location.

VALUE CAPTURE MAY BE USED TO ENHANCE ALL THREE TYPES OF GROWTH BY EASING DIFFICULTY OF LAND AGGREGATION, FACILITATING A MIXING OF PUBLIC AND PRIVATE PURPOSES, FUNDS AND ACTIONS AND ALLOWING PUBLIC PARTICIPATION IN LAND USE AND DESIGN DECISIONS. On the other hand, some Value Capture techniques may be used to retard growth where appropriate.

2d Institutional Arrangement Requirements

There are many restrictions on power to control land development, raise and spend money placed on any public entity. A particular transit or community development entity may not have sufficient powers to use excess or supplemental condemnation or to levy and collect various forms of taxes. Because of this other governmental units may be available or needed to obtain the benefits of Value Capture implementation. Better stated local leaders may find it more suitable, because of existing legal constraints and possibly more favorable financial position to use existing governmental units to carry on portions of the Value Capture process or indeed aspects of the transit development process itself. A city for example might find it far easier within its existing powers to condemn and acquire certain parcels needed for stop development than would a transit entity, or a city may choose to establish a new special development district which is charged by the state with transit related land development responsibilities and given needed powers. It is clearly not possible to illustrate all possible arrangements between different institutions.

This research uses a case study approach in the cities of Los Angeles, Louisville, and Chicago to discover and evaluate critical aspects of broadly different institutional settings. A great deal more, however, is left unexplored regarding potential institutional interrelationships.

2e Financial Issues

In general financial benefits are easily quantified once basic assumptions and land use program decisions are stated. This research relies on example application approach in order to illustrate financial success or failure as a function of clearly developed assumptions and project uses. Several important conceptual issues form the basis for parts of this research and are herein briefly introduced.

OPPORTUNITY COSTS

If in evaluating alternative land uses for a particular site one does not choose (for whatever reason) the one with maximum financial return then the difference in actual financial returns received versus the potential financial return can be considered a cost associated with the actual choice made. This cost (representing an unobtained opportunity) can be referred to as an OPPORTUNITY COST. There are many possible reasons why one may not choose the land use constituting the highest financial return including inadequate information, changes in market forces and pursuit of a complex set of objectives not solely limited to finan-

cial profits. In all cases however, an unobtained financial opportunity represents a financial cost.

CONSIDERATIONS OF TIMING

An important consideration in comparing alternative Value Capture techniques is the STREAMS of costs and benefits which accrue at different points in time. Simply comparing total outlays and total expenditures for the lifetime of each project is misleading since a development entity must care about when the costs and benefits occur. Since a dollar of net income today is worth more than a dollar of net income tomorrow, an alternative with high near-term benefits and costs delayed far into the future would be greatly preferred to the opposite choice, even if total benefits minus total costs is the same for both projects.

MEASURES OF RETURNS

Two choices present themselves in terms of measuring financial returns over the lifetime of the development project. The first of these can be called NET PRESENT VALUE which is calculated by adding all incomes together then adding all costs and subtracting costs from income for the life of the project. If costs and incomes are stated in 1975 dollars (as they are in this research) then this total is the NET PRESENT VALUE. The second measure can be called PRESENT DISCOUNTED VALUE. This measure uses a best alternative rate of return on investment as an additional cost to the project thus "discounting" the net present value in order to account for other competing investment opportunities. This research always states both figures. Where Value Capture develops and uses funds unavailable otherwise the discounting procedure would be questionable. If there are competing uses for the same funds at the local or national level, it can be used to account for the OPPORTUNITY COSTS.

EXTENT OF MARKET BOUNDARIES

A common financial issue is how to determine the extent of the relevant market (in terms of either households or properties) which is affected by building transit and using Value Capture to finance it. To do this, one must define which properties receive benefits from transit in the form of higher land values. It is these properties which receive capturable value increases and it is these properties which the transit entity will be most interested in acquiring or taxing. The evidence on this point is mixed, but most properties within "reasonable" (5 to 10 minute) walking distance of a transit stop can be assumed to receive transit related benefits. The proportioning of benefits as a function of specific location within this impact area could be facilitated by zones.

2f Community Design Issues

GENERAL TRANSIT SYSTEM SUCCESS

Community design benefits attributable to Value Capture are greatly constrained or enhanced depending in large measure on the failure or success of the entire transit system. Value Capture can BE OF MOST ADVANTAGE VIS-A-VIS COMMUNITY DESIGN BENEFITS IF IT IS ACCOUNTED FOR FROM THE BEGINNING OF THE TRANSIT PLANNING PROCESS.

In general terms the land development/transit system relationship can be viewed in two ways. Quite clearly accessibility is enhanced by transit at specific stop related properties. Second this relationship can be VIEWED as a means FOR STRUCTURING GROWTH and development in order to best be served by mass transit. Simply put, the community design aspects of Value Capture can facilitate the development of high concentrations of transit oriented land uses thus best serving the needs of the activities for transit mobility and the needs of the transit system for patronage.

MANY CONSTITUENCIES

That the history of city development and renewal is marked by many successes and failures will bring agreement from all. However, specifications as to what urban actions or projects have been successful or disastrous under what circumstances and for what reasons are seldom clear, often poorly understood, and always argued over. What may be success to one constituency is often seen as disaster to others. This reasoning is another cause for reliance UPON EXAMPLE ILLUSTRATIONS OF VALUE CAPTURE IN APPLICATION ACROSS A WIDE VARIETY OF CIRCUMSTANCES. Each application is evaluated from the point of view of a broad set of constituencies.

DISTRIBUTION OF BENEFITS - GEOGRAPHICAL AND TIME

The application of Value Capture results in the geographic redistribution of resources as well as the redistribution of costs and benefits to different segments of the population.

The consideration of redistribution problems cuts across many types of community design impact. At the stop level, for example, stop-related development may have differing impacts at a range of distances from the actual stop. Residents displaced by development may move many miles across town, taking their problems or resources along with them. This can result in both misleading interpretations of changes in the local community and under-estimation of impacts at a distance from the site. To the extent possible, this research distinguishes between geographic and demographic distribution of impacts.

Time is a key consideration in evaluation of community impacts. The fact that some impacts, such as relocation of existing residents, happen almost immediately, while others, such as population shifts and development of new activity patterns take place over time is critical in the overall evaluation. Timing of impacts affects political considerations as well as procedures required to establish net gain or loss of community design impacts. This research approaches evaluation of community design impacts by stating short and long range concerns.

AREA VS. PEOPLE

Community Design impact of Value Capture may be interpreted either in terms of effects on local neighborhood AREAS surrounding transit stops, or in terms of effects on PEOPLE affected by Value Capture. Wherever possible, both aspects should be and are herein considered.

The community or local area affected by transit related applications of Value Capture is easily defined, despite difficulties in drawing hard and fast boundaries. Through the use of statistical information some changes can be monitored or predicted within current state of the art techniques. Common statistical technique regardless of their effectiveness in the above tasks, give little indication of the effects on individuals, particularly those who are relocated from or move into the local impact area. To the degree possible this research evaluates the impact on particular individuals or groups as well as land areas around stops.

2g Public Participation Optimistic Caution

Value Capture, in 5 of its 8 techniques, facilitates new forms of PUBLIC PARTICIPATION concerning types and amounts of growth and the physical design of transit related projects. The history of public participation in the development process is full of more failure than success. Value Capture is not insurance against incompetence, and incompetence in application is not necessarily a condemnation of purposes or techniques. Value Capture techniques in application will help achieve community design benefits only as a function of the appropriateness of the projects which they help bring about.

2h The Young Amendment

The Urban Mass Transportation Act of 1964 as amended through November, 1974 contains important Value Capture related language known commonly as the Young Amendment. It states:

> "SECTION 3. *(a) (1) The Secretary is authorized, in accordance with the provisions of this Act and on such terms and conditions as he may prescribe to make grants or loans (directly, through the purchase of securities or equipment trust certificates, or otherwise) to assist States and local public bodies and agencies thereof in financing (1) the acquisition, construction, reconstruction, and improvement of facilities and equipment for use, by operation or lease or otherwise, in mass transportation service in urban areas and in coordinating such service with highway and other transportation in such areas, and (2) the establishment and organization of public or quasi-public transit corridor development corporations or entities. Eligible facilities and equipment may include personal property including buses and other rolling stock and real property including land (but not public highways), within the entire zone affected*

by the construction and operation of transit improvements, including station sites, needed for any efficient and coordinated mass transportation system which is compatible with socially, economically, and environmentally sound patterns of land use."

Emphasis Added

The language of this section indicates that local public bodies may use Federal funds to acquire and improve facilities (including real property and land) within the zone affected by the construction and operation of mass transit improvements needed in order to be compatible with sound patterns of land use. Further assistance is available for establishing public or quasi-public corridor development corporations.

As of this writing no guidelines have been developed at the Urban Mass Transit Administration regarding SECTION 3 as amended by 104a and 104b of P.L. 93-503 in 1974. Presumably this SECTION could be utilized as a vehicle for grants or loans for property acquisition for justifiable uses as would generate socially, economically, and environmentally sound patterns of land use. In the absence of guidelines comments herein must remain speculative and thusly funds from this source are discussed only in general terms.

Part 3 Evaluation and Findings

SYNOPSIS

This PART examines and evaluates issues associated with Value Capture in application to Los Angeles, Louisville, and Chicago. More detailed findings for each city are presented in PARTS 5, 6, and 7. These three cities were selected because they offered contrasting situations within which to investigate Value Capture. Los Angeles provided a major urban metropolis interested in developing a new line haul type transit system in a progressive legal context. Chicago provided a high density city where transit is a household word. Louisville provided a smaller low density city with a progressive bus transit system and questionable opportunities for a more sophisticated system in a context of moderate urban growth. This PART will present evaluations of important legal underpinnings related to Value Capture including public purpose, supplemental condemnation, monetary transfers, air and subsurface rights use, and intergovernmental cooperation; assess financial performance in terms of investment decision, sources of funds, and earnings flows through time; and finally illustrate community design issues.

LOS ANGELES

Los Angeles is the largest major U.S. city without some form of fixed guideway transit system. It also is close to proceeding in constructing the starter line of such a system. The present transit system (composed of express bus routes, park-and-ride, regular bus and mini bus services) is operated by the Southern California Rapid Transit District (SCRTD). Planning for a fixed guideway system has been carried on by SCRTD under the review of the Southern California Association of Governments (SCAG) for the last 4 years. Review and comment inputs have come from a number of member municipalities of SCAG, the City of Los Angeles included.

A referendum for an ad valorem tax to support initial system development failed at the polls in November of 1974. Efforts over the last year have concentrated on the development of a starter line. Although the exact location of this line and its stops is as of yet undetermined, this research concentrated on the application of Value Capture to this part of the overall proposed system.

LOUISVILLE

A moderate sized metropolitan area on the northern border of Kentucky, Louisville has experienced a slow but steady growth in recent years. It has a well developed freeway system and overall regional accessibility can be characterized as being good when compared with many other cities. Although plans for fixed guideway mass transit have been on the books for a number of years, little action has been taken.

The existing private bus company was acquired by a recently established city-county Transit Authority of River City (TARC) in August of 1974 and due to service improvements and publicity, transit ridership has increased by 10.9% over the past year--the second year of reversal of a 13 year trend of decline. The current operating plan for TARC includes numerous service improvements in the next five years including the initiation of a number of express and park-and-ride (PARK n' TARC) routes.

Inclusion of Louisville in this research provided an opportunity to consider the minimal threshold of transit needed for application of Value Capture. A specific existing transit plan was not used for this work. Instead, routes and stops assumed were based on corridors in which overall transportation improvements (either highway or transit) are needed and stop locations were identified in several previous transit plans. Alignments, except in areas where specific stop situations were studied, were not firmly fixed in this research.

CHICAGO

In radical contrast to Louisville, Chicago provided an opportunity to look at Value Capture in a city where hundreds of thousands of people are dependent upon transit services daily.

The Chicago Transit Authority (CTA), established in 1940, operates the major portion of transit services including elevated, grade, and subway rail and bus service. A number of private railroads operate commuter services from outlying areas to the central city.

The age of the existing CTA system in the

"Loop" area and general need for overall circulation improvement have resulted in plans for major system improvements. To execute these plans, a special agency, the Chicago Urban Transportation District (CUTD) was formed in 1969. Upon completion of these improvements the CTA will operate these improvements as a part of their regional system.

This research has focussed on several locations in the proposed improvements in the central city of Chicago as well as a stop located in Evanston, Illinois, to the north of Chicago.

3a Legal Evaluation

In the first phase of the Value Capture Research report dealing with Houston several methods by which a governmental entity charged with developing a transit system might implement Value Capture were presented. These methods which have been formalized into the techniques in Part I are dependent upon 5 legal underpinnings.

1) public purpose,

2) supplemental condemnation,

3) monetary transfer,

4) air and subsurface rights condemnation and use, and

5) intergovernmental cooperation

In this Phase II research investigation has been made into these issues in the three cities by conferring with local experts who are familiar with the laws which would help implement or constrain Value Capture. When appropriate, this work has further attempted to summarize and, in some instances, quote from statutes, cases and other materials which these experts suggested. Also when appropriate, an attempt was made to describe certain techniques which were reported that did not appear in any category in the initial research. What follows is a summary of legal findings.

PUBLIC PURPOSE

The need to condemn land for a public purpose is a legal shoal upon which many public projects have foundered. With respect to Value Capture, the techniques of supplemental condemnation and utilization of air and subsurface rights depend heavily on a liberal construction of the concept.

It is fair to say that in terms of practice, if not always in terms of theory, Los Angeles, Chicago and Louisville are in jurisdictions which either broadly define public purpose, or in which the courts have permitted fairly broad-ranging public projects heavily tinged with private interest on land condemned by a public agency. It is true that in nearly every case the courts in these jurisdiction have required either expressly or by implication a statutory declaration of public purpose upon which the power to exercise eminent domain in each instance was based. However, absent fraud or a gross abuse of discretion, the courts have rarely taken it upon themselves to find such a legislative declaration beyond the permissable limits for exercising the power. There appears to be a trend to find such a public purpose in projects clearly envisioning major participation by the private sector, even if it is difficult to find precedent in the jurisdictions for exercising the power of eminent domain to acquire property solely to guarantee the economic success of a public project.

SUPPLEMENTAL CONDEMNATION

In general, some measure of supplemental condemnation is legal in each of the three cities. In part, this is due to the aforementioned treatment of public purpose and public use. In part, it is due also to the tendency to view aspects of supplemental condemnation discussed in the Phase I report, not as supplemental condemnation at all, but as a valid exercise of the power of eminent domain for public purposes. This is especially true with respect to the condemnation of land by a public agency for further use in accordance with some sort of plan. The use of such land in a fashion to generate some sort of income until the need for which it was acquired became immediate is, in most instances, not only permissable but actually viewed as a duty by many of the experts with which the concept was discussed. However, we were cautioned that the further in advance the acquisition occured in relation to need, and the more permanent the "temporary" use, the more difficult it might be to sustain the compulsory acquisition in the first place.

Remnants, so long as not out of proportion to the property condemned for a declared

public purpose, also posed little problem in the three cities. California case law probably has the most liberal interpretation of what constitutes a remnant. As in the case with future needs condemnations discussed above, use of such remnants is generally not restricted solely to these public purposes for which the main parcel was acquired.

The most difficult instance of supplemental condemnation and the one most directly tied to judicial attitudes toward public purpose, is the exercise of eminent domain for the economic preservation of a public project. Earlier work noted judicial attitudes in at least two jurisdictions for compulsory acquisition (Atwood V. Willacy Navigation District, 271 SW 2nd, 137 and Courtesy Sandwich Shop, Inc. v. Port of New York Authority, 12 N.Y. 2d 379, 190 N.E 2d 402 (1963). App. dismissed 375 U.S. 78). We were unable to uncover similar cases in California, Illinois or Kentucky. On the other hand, cases in Illinois have upheld acquisitions for projects which clearly contemplate public-private partnerships with considerable capacity for the generation of income streams by the private sector flowing to the public agency involved. Practice in the other jurisdictions, usually authorized by statute, contemplate similar relationships. Under these circumstances, the inability to exercise the power of eminent domain to acquire "extra" land to ensure the economic benefit of an entity may not be particularly important.

MONETARY TRANSFERS

The creation and diversion of income streams is one of the more fascinating--and frustrating--methods for accomplishing Value Capture investigated. Considerable legal support was found for such techniques in two of the three cities (Chicago has chosen to deal with new rapid transit by means of the creation of special tax districts). In fact, a technique was "discovered" about which little had been heard in earlier investigations to be either well-advanced or under active consideration in both Kentucky and California.

In both Kentucky and California the technique of tax increment financing is being utilized to separate from the ad valorem property tax income stream that portion within a jurisdiction which has been generated by a particular public renewal project. In California, such tax increment financing has been authorized and proceeding for some time--especially in the City of Los Angeles. In Kentucky, the recently-passed statute authorizing tax increment financing is currently being tested in the courts. Experts have suggested that the technique could be utilized to guarantee that increases in property value generated by the location of transit stops would be partially returned to the transit entity creating such value by the separating of those ad valorem tax revenues reflecting such increase in value from these tax dollars which would normally flow to the general fund of the city or county. The system has the political advantage of imposing no new taxes or charges upon those thus benefitted. On the other hand, the amount of value thus "recaptured" to the public generally remains the same. Only the recipient has been altered.

California authorizes the recapture of value by the imposition of a special benefit assessment upon property located in close proximity to a transit stop. Unfortunately, the statutory procedures for levying this assessment have never been used.

Finally, Louisville has created similar "assessment" districts for the financing of pedestrian walks, levying a tax on both adjacent and non-adjacent commercial properties to be benefitted by such a public project. The statute pursuant to which the city acted has not, however, been tested in court.

AIR, SURFACE AND SUBSURFACE USES

One of the most fruitful lines of inquiry has proved to be the utilization of existing and validly-acquired property for private, income-producing purposes. In most instances, the land was acquired for some transportation-related purposes, even if not for rapid transit systems. As discussed earlier, many experts viewed the utilization of property rights not presently needed for the public purpose for which acquired (whether or not by condemnation) as verging upon a duty. Examples of such private uses on public property abound in all three jurisdictions. Of particular note are the multiplicity of private shops and kiosks in rapid transit stations in Chicago and San Francisco, restaurants constructed over tollways in northern Illinois generally, and the use of land under and over freeways in California for everything from warehouses to restaurants. This type of use, generally pursuant to statutory

authorization, has been remarkably free of litigation.

INTERGOVERNMENTAL COOPERATION

By and large, intergovernmental cooperation has not been a fruitful method for accomplishing Value Capture except in parts of California outside Los Angeles. While specifically authorized in all three jurisdictions, it is clear that with the aforementioned exception, the right to cooperate in a venture connected to mass transportation does not necessarily lead to an inducement to do so.

However, it is true that in California there is authority for public agencies and municipal corporations to enter into joint powers agreements by which one agency acts as a "lead" agency for the rest, exercising many of their powers, with the agreement as the source of authority (backed by statutory authority to so agree) to do so. Acting under such agreements, agencies like the Bay Area Rapid Transit Authority (BART) have acquired land for highways and for adjacent municipal purposes at the same time as they exercised statutory powers to condemn land for such as rapid transit system purposes.

OBSERVATIONS

Conclusions at this point are not greatly altered from the Phase I work completed nearly 2 years ago. Value Capture remains a legal method of obtaining funds for rapid transit purposes, and a mix of the techniques described above will work in the three study areas. By and large, statutory authority together with some sort of plan is necessary to justify the acquisition and, in some cases, the developments in terms of public purpose. Techniques to which we have previously been unexposed in this connection, like tax increment financing, only strengthen the basic optimism that Value Capture, if approached properly, will rarely encounter insurmountable legal hurdles.

3b Financial Evaluation

No major transportation system in this nation currently operates at a breakeven position financially. Coupled with this, there is often continued planning for transportation improvement programs. For many years cities have faced the unresolved dilemma of financing mass transit in view of ever increasing uncertainty regarding future federal assistance programs. In short, realistic projections of operating costs and revenues, augmented by rising inflation and aspiration, require substantial funding sources other than the fare box. This investigation and analysis clearly shows that "wealth" can be enhanced and recaptured through the use of Value Capture. The risks, types and amounts of potential enhancement and recapture are limited by a specific set of financial parameters.

These parameters include:

1) the technique to be utilized to recoup public expenditure in transit, as introduced earlier;

2) the sources of funds available to finance the investment opportunity of recapture; and

3) the evaluation of the future benefit to be captured, the earnings stream or return to be derived.

As finance is a dynamic decision-making process, these parameters and their interrelationships are central to evaluating the feasibility, availability, and potential of Value Capture. Each of these parameters is introduced and key issues and findings are presented.

EVALUATING THE INVESTMENT OPPORTUNITY OF RECAPTURE

As a financial parameter, the opportunity of recapture afforded by the implementation of any of the Value Capture techniques represent investment actions. As such, these techniques are considered investment alternatives, because they require the laying out of capital, time, and human resources for income or profit, constituting the value recaptured. In this instance, as a particular parameter of finance, the investment opportunity of these particular techniques are assessed in terms of the following issues:

1) Periodic income -- the capacity of a technique to provide cash flow or yield.

2) Capital Appreciation -- the increase in market value of the investment above its initial cost, is a second potential return that can be realized during its life or when it is sold.

3) Safety -- reflects the degree of certainty of realizing the return of a periodic future income stream.

4) Risk -- the opposite of safety, describes the extent of uncertainty in the ability to realize a return from the future periodic income stream.

5) Liquidity -- reflects the ability of an investment action to be promptly converted into cash.

6) Manageability -- is the extent to which a technique must be monitored and managed over time.

Each Value Capture technique is discussed accordingly in the following paragraphs.

Ad Valorem Property Taxation

Of all the techniques which constitute Value Capture this one is perhaps the easiest to implement. The transit entities in Chicago, Los Angeles, and Louisville all have the necessary enabling legislation authorized by statute to levy an ad valorem tax. Although the Chicago Urban Transit District (whose boundaries are within the CBD of Chicago) is the only entity currently receiving such benefits. According to experts interviewed in these cities, it is unlikely that the electorate would levy an additional tax upon itself where the benefits are so unevenly distributed on a city-wide basis. The application of this technique does provide for front-end capital to finance transit system improvements; however, typically, except for Chicago, these tax receipts are used for no other purpose than repayment for specific forms of bonded indebtedness. Although this could be changed, this technique is currently a fiscal transfer device and does not provide for direct recapture. In Chicago, these assessments can either be for the purposes of securing bonds or for direct financial assistance for capital improvement programs.

Another significant issue affecting this technique's income stream is the degree to which these taxing jurisdictions possess sophisticated statistical update procedure for assessments and whether assessments are collected close to their true value. In Los Angeles, no problem would exist as such a system is in place and updates are made yearly; yet in Chicago, updates occur every four years.

Special Benefits Taxation

California is a forerunner in the consideration of various forms of this technique as specifically related by statute to transit entities. What has been authorized in California is the special (transit) benefit district and also improvement districts. In both Chicago and Louisville limited precedent exists for this application. If indebtedness is incurred to build transit then this debt service need could be substantial and would constitute a direct form of recapture. If indebtedness is incurred for transit related development only then this technique represents a fiscal transfer mechanism.

Compared with the ad valorem taxation, special benefit taxation would not provide as broad a tax base. On the other hand it would place the bulk of the tax burden on those properties directly benefiting from transit.

Tax Increments - Marginal Value Taxation

Marginal value taxation through the use of tax increments is available by statute to redevelopment agencies in California and Kentucky, with no authorization in Illinois. In this manner, redevelopment projects are financed in California (Kentucky has not utilized this technique yet, a test case is pending) by withholding the amount of taxes collected from the increased assessed valuation of property once development has been completed. These tax receipts withheld are credited to the redevelopment agency until all costs borne by the agency have been paid. To utilize similar powers for the recapture of increased property taxes as a result of new development in and around transit stops yet outside of any declared renewal areas, this enabling legislation would have to be amended. Although land values would provide revenues immediately with this technique, full tax increments from development would not be generated until development was complete.

In its present form, the application of Tax Increments is in some respects a fiscal transfer mechanism to provide the base security for tax allocation bond issues. In this respect, the tax increments are keyed in amount to the necessary debt service requirements with any surplus above the frozen base being redistributed to the collecting tax jurisdictions. Both this and the Special Benefits taxation technique require defining impact districts and/or zones of impact. These are often difficult to defend and administer.

Develop/Hold--Real Property

This technique is an established fact in Chicago, where ancillary concession facilities are licensed to independent operators. Such facilities include park-and-ride lots, food vendors, and the like. Los Angeles has established parking facilities appurtenant to bus ways and Louisville is considering the same venture. Among those interviewed, the general concensus in all three cities is that, to date, emphasis has been on facilities which are a convenience to the transit rider and as such, the intensive pursuit of this instrument may raise legal issues. The income stream generated by this instrument is a direct function of the type and scale of land-uses developed.

This income stream is not without risk and is associated with attributes of the real estate market which create deviations from expected returns, namely occupancy rates, absorption rates, and general market conditions. It is important to realize that the effectiveness of this technique is coupled with concurrent development of the transit system, and as such requires additional capital beyond the system cost itself. Thus, the income stream is latent to the development of the system and will not provide front-end capital to defray capital costs of the system, except for later phases. Presumably, the capital required initially can come from several sources, for instance, the entity's own equity or capacity for bonded indebtedness. In spite of substantial administrative costs, as a Value Capture alternative this technique is attractive, with its income stream a function of the land-uses established the amount recaptured can be substantial. This stream is enhanced by such contracts as step-up leases, revaluation leases, or percentage leases. On the other hand risk and uncertainty represent potential problems in any project which utilizes this technique.

Develop/Sell--Real Property

Of the experts interviewed, this technique is considered the least attractive. There seems to exist uniform agreement that the direct application of this technique is best suited to the development of residential land-uses, as typically no market exists for commercial facilities, except on a turnkey basis. Problems include large front-end capital requirements and illiquidity of the investment. Illiquidity is a factor especially if the market is overbuilt; yet, a turnkey project, with a negotiated purchase agreement prior to construction, alleviates this risk element. Further, another problem to consider according to one bond counsel is whether the transit entity would have to retain fee simple interest in development rights, acquired by eminent domain and financed by a bond issue.

In general, the income stream derived by the Develop/Sell option is a function of land assemblage and the scale and type of land uses established. The return is lump-sum in nature and does not provide initial front-end capital to finance transit improvements because of lag in construction time. Large administration costs are associated with this technique.

Hold/Sell--Real Property

As an investment opportunity, the application of this technique does not provide front-end capital to finance transit improvements except for future or ongoing phases. Of the three cities investigated, all transit entities were granted power in their enabling legislation to divest interest in surplus development rights. Chicago actively pursues this type of sale.

Again, the key legal determination is the extent and scale of land that can be acquired initially. Financially, this determination is the key variable for the expected return, as the concept is outwardly simple. The more land acquired, and available to be sold, the greater the profits. Naturally, astute timing of land purchases is essential for large returns using this technique. A major element of risk is the speculation aspect of the Hold/Sell option, to the extent that appreciation becomes too quickly capitalized into the land value before their purchase by the transit or development entity. Problems include the need for front-end capital and illiquidity. As such, risk is attached to the timing of purchases, sale and capture of the maximum value. In short, there appears little difficulty for a transit entity to divest interests in surplus holdings, but front-end risks and costs must be overcome in order to recapture significant returns.

Lease--Real Property

Theoretically, the application of this technique has the potential to perform almost as well as marginal value taxation, provided the lease contracts are either revaluation leases, step-up leases, or percentage leases. Its application is an established fact in Chicago and called for in both Los Angeles' and Louisville's transit entities enabling legislation, specifying the power to dispose of development rights via leases. The income stream derived by this application does not provide front-end capital to finance initial improvements; however, potential exists in the short term once an initial segment is developed for future phases. It should be noted that the capital needed to acquire these development rights is a function of the project and use of air rights properties. Further, the magnitude of the income stream is keyed to the aggressiveness of the transit entity and its legal ability to divest interests in surplus development rights. Less risk accrues to the lease--Real Property option as it has been shifted to the lessee and his solvency. Large administrative costs are associated with this technique.

Participation--Real Property

Of all the cities investigated, Chicago is the only one pursuing a variant application of this technique in terms of transit use/joint development. Among the experts interviewed, the common concensus suggests that there may not be much incentive for another public sector agency adequately producing its own revenues to go into partnership with a transit entity that does not have the same revenue generating capacity. Thus, the major issue and problem is the sharing of revenues and the likelihood of not being able to do more in concert, than could be done individually. In Louisville, it is worth noting that urban renewal agencies' revenues cannot be applied to the acquisition and operation of a public enterprise jointly with a private corporation, as upheld by Kentucky courts. In other jurisdictions a transit entity could legally subordinate some part of its transit-related land to a private developer for some return on a percentage basis from his income stream or perhaps via some enhancement in tax receipts. This technique requires substantial administrative costs and will not produce front-end capital.

EVALUATION OF SOURCES AND USES OF FUNDS

This financial parameter consists of alternative sources of funds available to finance the investment opportunity afforded each Value Capture technique. The need for a front-end capital structure is critical not only to finance transit related development but also for initial development of some segment of the transit improvement itself. The financing of each of the alternative techniqes is concurrent with the development of transit improvements such that before either taxation or real property options are fully implementable, front-end costs must be incurred and financing arranged. Two sources of funds related issues are worthy of consideration: (1) the financial and liquidity picture of the transit entity and (2) the availability and budgetary aspects of funding sources.

As is typical with most transit operations in this country, Louisville, Chicago and Los Angeles are deficit operations, having financed acquisition of predecessor transit properties through revenue bond issues. As transit fares have not kept pace with operating expenses, including debt service requirements, these bond issues are in a poor financial position. In Los Angeles, these bonds are in technical default. In Chicago, the trustee is attempting to gain additional security from the Modernization Fund. Louisville does not have these problems. Because of the nature of these existing trust indentures, experts in Los Angeles and Chicago consider it financially unwise to secure additional financing by such forms of bonded indebtedness. Thus a major caveat for the application on Value Capture is that some transit entities have so much existing debt in their capital structure that they cannot use this as a source to finance initial front-end cash which is a prerequisite for some Value Capture techniques.

Federal Sources

UMTA funds offer some potential for initial development of a portion of these improvements until the income stream from Value Capture begins to flow. Such funding would provide for initial land acquisition, affording real property oriented techniques their needed basis, as well as hardware and planning development, an essential ingredient for the anticipated appreciation process to materialize. One question raised

by many of those interviewed was whether UMTA would require the initial recapture, if UMTA funds are used to garner this income. Others have argued that as the earned increment in value would substantially reduce future needs for UMTA funds, they would be willing to forego this return. Recent amendments to the 1964 UMTA Act, Sections 104 (a) and (b), the Young Amendment, provide for the creation of transit corridor development corporations or entities and offers the potential to assemble needed transit-related land parcels. PART 2g presents important issues pursuant to this source of funds.

Bond Issues

While some uncertainty exists with front-end capital for initial system development from different types of federal assistance, an opportunity does exist at the local level for various forms of bonded indebtedness to finance Value Capture. It is important to note a potential problem regarding an entity's existing indebtedness. A possibility exists that revenues derived from Value Capture might be encumbered to provide additional security for current fare box based trust indentures because of poor fare box returns. This is presently the case in Chicago where revenue derived from real estate dealings is being sought by the trust agent to be diverted from the Modernization Fund so as to supplement fare box revenues. Barring this problem, bonds could be issued by a city or county on behalf of the transit entity secured by its own obligations, or the transit entity could issue its own bonds secured by revenue producing projects or its own tax base.

Bonds issued by the City or County on behalf of the transit entity, as could be the case in Louisville, face key problems. In regard to the current climate of municipal offerings, according to underwriters interviewed, both investors and underwriters and especially the transit entity itself should be concerned with future uncertainty of governmental administrations. For instance, one administration may be willing to aid the transit entity by its general obligations to finance initial transit improvements or Value Capture techniques while the next might not. As such, the transit entity could be left without needed assistance. Again as exemplified by Los Angeles and Chicago having the power to create a tax base to issue forms of tax allocation bonds, the public electorate, like local governmental officials could vote yes one time and no the next. Thus, various forms of revenue bond issues which have a no referendum, no vote status offer the most stable opportunity.

Relation to Value Capture Techniques

Given these considerations, various forms of bond issues related to Value Capture Techniques are noteworthy. Ad valorem taxation, special benefit assessment districts, and marginal value taxation all provide tax receipts which can be used to secure limited tax bonds or tax allocation bonds, known as tax increment financing. As previously mentioned, while the magnitude of such bond issues can be substantial, the issue of instability over a long horizon is a significant problem. In reference to tax increment financing, these bonds are secured on a project by project basis and as such their stability is secured for each issue. As the redevelopment agency in Los Angeles is a city agency, these bond issues are authorized by ordinance of the Board of Supervisors and changing political attitudes adds instability to such issues. Special assessment bonds in Los Angeles do not fare particularly well with investors, because of default of such issues along Wilshire Boulevard in the 1930's -- notoriously labeled "palm tree" bonds.

In reference to various real property techniques, certain bond issues seem to gain some support among bond counsel. It appears feasible to finance the Develop/Hold technique by a bond issue secured by project revenues, such as parking revenue bonds. Yet, these type of bonds are typically poorly rated and usually require additional back-up security.

Bonds issued to finance facilities and installations under the Develop/Sell technique have the problem of a penalty upon early retirement of the issues. To a great extent, this is avoided if the project is turnkey with short-term obligations issues, as is typical with tax-exempt industrial revenue bonds.

Among experts interviewed, bonds issued in behalf of the Hold/Sell technique presented the greatest problem. The general concensus was that no bonds could be publicly marketed on the promise of repayment from future land sales.

Bonds could be publicly marketed on behalf of the lease technique with the promise of repayment secured by ground or air rights leases provided contracts are negotiated and arranged prior to issue and a major lessee undertakes a lease to run with the terms of the bond issues. Such bonds would finance initial acquisition of development rights.

Industrial revenue bonds, as available in Kentucky, present a unique consideration. Section 1036.4, Code of Federal Regulations, Title 26, Internal Revenue, specifies tax exempts for mass commuting facilities. This application has never been used and according to one bond counsel, such issues would have to be court tested, under the rules for industrial revenue bonds for profit-making enterprises.

EVALUATION OF THE INCOME STREAM OF RECAPTURE

The third financial evaluation parameter of Value Capture Policy is related to both theoretical and empirical problems and opportunities associated with the income stream to be derived. In later PARTS of this report, Bottom Line conclusions present pro forma financial analysis, suggesting the income streams that could be derived given the postulated situations and land use programs and prognosis for each Value Capture technique. As such, the intent of this section is to present those issues which might not only alter the magnitude of the recapture, but also limit its application to defraying costs of transit system improvement programs.

Financial Position

As previously considered, outstanding debt poorly secured by deficit fare box revenues may encumber Value Capture's income stream from being applied directly to defray capital costs of transit system improvements. The noteworthy example is in Chicago where the transit entity's trust indenture presents a major constraint. Such trust indentures specify the priority for the application of revenues derived. Typically, starting with debt service payments, sinking funds and the like, and finally ending with allocations to a Modernization Fund for development of transit improvements -- this is net revenues after operating expenses. As operations are usually in deficit, all other revenues - as in Chicago revenues, derived from real estate operations - are encumbered by these higher priorities, leaving little if any surplus for improvements. In this respect, revenues derived by Value Capture in some instances might first supplement operating deficits with surplus flowing into the other priorities, leaving potentially a medium deposit in the Modernization Fund. Yet, all is not lost depending on the magnitude of recapture. The opportunity potentially exists to retire all outstanding funded debt over the short-term and in the long-term to defraying costs of improvement programs.

Inflation of Land Values

An essential issue affecting this income stream is the consideration that land values might be already too inflated before new improvements, as might be the case where a transit entity has had a line haul system established for many years.

Legal Constraints

As related to the real property techniques, the magnitude of the recapture is a function of the legal ability of the transit entity to acquire, manage, and control transit-related land parcels and development rights. As such, the legal extent to which the transit entity can deal in land, given issues of public purpose, supplemental condemnation, and surplus land holdings effect the magnitude and timing of the recapture.

Front-End Capital

An essential feature of the Value Capture income stream is its potential to provide front-end capital in varying degrees. Real property techniques do not afford this opportunity and in most cases themselves require front-end capital. At best, the recognition of this income stream can be considered latent to the development of some initial phase of the improvement program. Therefore, initial funding is needed to finance Value Capture concurrent with funding to develop the transit improvements. In this respect, timing and phasing are the central issues. Once one phase is generating recapture income the opportunity exists to apply this income to the next phase of the improvement program, then the process could be replicated for future phases, and upon termination of the programs, revenues accrue over the long-term to repay part or

all of initial or intermediate financing requirements. This is the funds flow concept of Value Capture.

FINANCIAL OBSERVATIONS

It is clear that the application of Value Capture from a financial standpoint provides noteworthy opportunities as well as a number of potential problems. Because of the difficulty in assessing the total impact of transit upon the land market in any of the case study cities, no estimate of the overall magnitude of recapture can be easily and accurately derived.

Focussing on the stop situations for each city it is possible to understand the returns given specific example development

VALUE CAPTURE APPLICATION			VALUE CAPTURE RESULTS			TRANSIT SYSTEM ASSUMED RESULTS		COSTS DEFRAYED	
STOP SITUATION	DEVELOPMENT PROGRAM	VALUE CAPTURE TECHNIQUE APPLIED	Development Capital Cost (x $1,000)	Net Accumulated Cash from Devel. (x $1,000)	Net Present Value of project w/8% disc. (x $1,000)	Transit Segment Length (miles)	Transit Segment Cost Estimate (x $1,000)	% Defrayed w/Net Acc. Cash (%)	% Defrayed w/Net Pres. Val. (%)
Los Angeles - Watts I (103 @ Graham Sts.)	Stop, Parking, Commercial	Develop/Hold	1,650	2,490	690	2.3	7,900	31.5	8.7
Los Angeles - Watts II	Stop, Parking*	Develop/Hold	680	-410	-260	2.3	7,900	-5.2	-2.9
Los Angeles - Expo I (Exposition Blvd. @ Figueroa)	Stop, Parking, Commercial, Office, Hotel	Develop/Hold, Land Lease	17,310	115,380	41,300	1.5	35,750	322.7	193.8
Los Angeles - Expo II	Stop, Parking, Commercial, Office, Hotel	Develop/Hold, Increment Tax Financing	1,590	30,490	11,330	1.5	35,750	85.3	45.3
Los Angeles - Expo III	Stop, Parking, Commercial, Educational Facil.	Develop/Hold	20,300	17,910	3,660	1.5	35,750	50.1	10.2
Los Angeles - Wilsh I (Wilshire Blvd. @ Western)	Stop, Parking, Commercial, Office	Participation, (10% partner)	51,980	13,260	4,240	1.5	35,200	37.7	12.0
Los Angeles - Wilsh II	Stop, Parking, Office, Commercial	Develop/Hold, Increment Tax Financing, Air Rights Lease	3,640	50,740	18,740	1.5	35,200	144.1	53.2
Los Angeles - Wilsh III	Stop, Parking, Commercial, Housing, Office	Develop/Hold, Land Lease	5,090	107,360	40,480	1.5	35,200	305.0	115.0
Chicago - Monroe I (Monroe @ Wells)	Stop, Commercial	Develop/Hold	8,150	-5,600	-3,410	0.1	33,600	-16.6	-10.1
Chicago - Monroe II	Stop, Commercial	Develop/Hold	6,200	-9,310	-4,520	0.1	33,600	-27.7	-13.4
Chicago - Grand I (Fairbanks Ct. @ Grand Ave.)	Stop, Parking, Office, Commercial, Health Fac., Housing	Develop/Hold, Land Lease	17,510	148,270	54,320	1.3	35,230	420.8	154.2
Chicago - Grand II	Stop, Parking, Commercial, Office Health Fac., Housing	Develop/Hold, Land Lease, Ad Valorem Taxation	42,440	88,700	27,320	1.3	35,230	251.8	77.5
Chicago - Evanston I	Stop, Parking, Commercial	Participation (10% Partner)	4,720	1,470	470	-NC-	-NC-	-NC-	-NC-
Chicago - Evanston II	Stop, Parking, Commercial, Housing	Participation (20% Partner)	21,920	12,670	4,050	-NC-	-NC-	-NC-	-NC-
Louisville - G.E. I (Buechel Bank Road)	Stop, Parking, Commercial	Develop/Hold	2,730	4,320	1,220	1.6	1,700	254.2	71.8
Louisville - G.E. II	Stop, Parking, Commercial, Office, Housing	Develop/Hold, Land Lease	15,390	4,520	-680	1.6	1,700	265.7	-39.9
Louisville - Valley I (Valley Station Road)	Stop, Parking, Commercial, Office	Develop/Hold	8,560	7,220	1,420	1.5	800	902.4	177.0
Louisville - Valley II	Stop, Parking, Commercial	Develop/Hold, Land Sale	2,390	4,350	1,340	1.5	800	543.9	167.6
Louisville - Valley III	Stop, Parking	Develop/Hold	365	-12	-60	1.5	800	-1.5	-7.75
Louisville - Watterson I (Watterson XWay @ Southern Pkway.)	Stop, Parking, Commercial, Office	Develop/Hold, Land Lease	5,760	730	-610	.9	1,350	53.9	-45.1
Louisville - Watterson II	Stop, Parking, Commercial, Office	Develop/Hold	8,760	1,930	-630	.9	1,350	142.9	-46.8
Louisville - CBD I (2nd and Liberty Sts.)	Stop, Parking, Commercial	Develop/Hold	3,470	3,290	710	1.2	500	657.6	142.2
Louisville - CBD II	Stop, Parking, Commercial, Office	Develop/Hold, Land Lease	2,510	6,230	1,770	1.2	500	1245.6	354.6
Louisville - CBD III	Stop, Parking, Commercial, Office	Develop/Hold, Increment Tax Financing	2,150	7,620	2,290	1.2	500	1524.4	457.0

Fig. 1/8.

STOP APPLICATIONS: SUMMARY AND COMPARISON OF INVESTMENT ANALYSES RESULTS

NOTE: LAND/AIR RIGHTS LEASES CALCULATED BY LAND RESIDUAL TECHNIQUE

programs and Value Capture techniques employed. The following figure (Fig. 3-1) is similar to Fig. 1-7 presented in Section 1b. It provides a comparative view of the transit related development costs, returns from Value Capture application, and an estimate of the transit system cost which can be defrayed using Value Capture. Note that the transit related development costs include that of the station itself. All development costs reflect those to the transit development entity itself and not those to other developers found in the land or air rights lease and tax techniques application. The transit segment may be defined as that portion of a system equal in length to the distance to the mid-point of the two adjacent stops.

In the earlier summary, only the net accumulated cash over the 25 year development period was shown. Where applicable this did not account for alternate uses of funds on the part of the transit entities. The figure here provided a net present value of the project returns with an assumed discount rate at 8% annually. This provides a range of the net returns assuming uses for funds with some rate of return other than zero. (NOTE that all project returns were calculated at an assumed inflation rate of 5% annually.)

It is apparent given that financial Value Capture results across these 24 different stop applications vary widely. This variation is attributable to the stop context, market assumed for development uses, techniques for Value Capture employed, and assumed discount rates for alternate uses of funds.

As can be seen, several Value Capture Applications defray over 500% of the transit segment costs, many defray over 100%, many operate at well below 100% and some suffer significant financial failure. Mindful of the restrictions placed earlier on interpretation, these results represent information a developer would typically use in preliminary investment evaluations. At this stage he would eliminate any financial failures from the options and proceed with those that look as though they would be most successful. In this light, IT CAN BE CONCLUDED THAT VALUE CAPTURE REPRESENTS A MEANS TO DEFRAY TRANSIT COSTS ASSOCIATED WITH IMPLEMENTING NEW TRANSIT SYSTEMS. FURTHER THAT THE DEGREE OF VALUE CAPTURE SUCCESS OR FAILURE TO DEFRAY SUCH COSTS VARY SUBSTANTIALLY WITH SITUATION AND TECHNIQUE. Many of these examples show that land leases and tax increments can provide greater returns than develop/hold applications. Of course, design control which is very important to community design issues may have to be traded away in the process. Participation seems less productive than pure develop/hold situations. These do provide, however, an advantage in extension of project design control into a larger area of the stop context.

Overall, magnitude of returns seem approximately proportionate to the initial investment in transit. In other words, the amounts generated and recaptured in stop related development tends to vary in the same direction as the costs of transit improvements. Expensive transit tends to encourage substantial development which helps build recapture potential.

3c Community Design Parameters

The following evaluation parameters or variables have been used throughout the analysis of case study situations to monitor the impacts of Value Capture at the local level (the stop and its proximal surroundings). The discussion of each parameter includes definitions, reasons for consideration, a description of measurement techniques, and a brief overview of findings in application of Value Capture to specific stop situations in the cities of Los Angeles, Louisville, and Chicago.

IDENTIFYING IMPACT GROUPS: ORGANIZATIONS AND CONSTITUENCIES

Since the effects of Value Capture are both quantitatively and qualitatively different for different people, analysis of Value Capture must identify the various population segments affected, and determine their implicit or explicit goals or conventions. Generally this work differentiates between two major segments: organizations, and constituencies.

Organizations

Organizations are considered to be any body with a stable membership which has a shared, explicitly stated purpose. Frequently, publications or past records are available which indicate in some detail the goals and poli-

cies of the organizations which can be used to predict their interests and concerns about future developments. Organizations in a local area can act as a group to have a voice concerning development and their participation in decision making is important and in fact required in many cases.

Constituencies

These are considered to be disaggregated populations who have common interests but no organizational framework or explicitly stated goals. Many constituencies have a multi-faceted involvement in a community as opposed to specialized interests such as financial or economic concerns. In spite of many shared interests, however, constituencies cannot be assumed to act together concerning public issues, and may in fact have widely divergent motivations and concerns. In most cases in this work, constituencies are defined statistically rather than through direct investigation.

The following list presents major organization and constituency groups affecting or affected by the stop applications during the course of this work.

ORGANIZATIONS

Governments

Municipal Governments (Tax Dept., Planning, Public Works, Parks & Recreation)
County Governments
State Governments (Highway Department)
Regional Governments - COG's
Federal Government - EPA, HUD, HEW, DOT/FHWA

Local Agencies

Redevelopment Agencies
Housing Authorities
Transit Planning/Coordinating Agencies
Special Districts: Water, Fire, Utility, Pollution
School Districts
Service Agencies: CAP's, CD, Welfare, etc.

Citizens Groups/Special Interests

Civic Clubs/Ad Hoc Citizens Groups
Special Interest Groups: Environmental, Public Lobbies, Chamber of Commerce, Historical Preservation
Churches
Transit Companies
Utility Companies
Labor Unions
Political Representatives

CONSTITUENCIES

Resident Homeowners, Tenants
Landlords/Land Owners
Employees/Employers
Shoppers/Retailers
Developers/Entrepreneurs
Elderly or Handicapped Groups
Children/Families
Pedestrians
Voters
Transit Users: Auto, Bus, Mass Transit
Users of Parks, Recreation, Religious, Service or Cultural Facilities
Students/Educators
Tourists/Visitors

Findings

In general, the new residents, employees, shoppers and services users associated with the joint development aspects of Value Capture were benefited substantially in terms of mobility, choices of jobs, shopping and use of civic facilities. As for the communities and neighborhoods which become the hosts for transit and related developments the results represent a mixture of benefits for some and dis-benefits or negative impacts for others.

BUECHEL BANK ROAD, LOUISVILLE Fig 3/2

In most cases, resident owners were the most important single group identified, and showed wide variations in impact. For example, in Louisville, major positive impacts were projected for the Buechel/GE stop where new development would upgrade the infrastructure, provide needed services and improve transit access. At the Watterson Expressway and Southern Parkway stop, major negative impacts were projected due to relocation and disruption of the neighborhood image and activity patterns. Tenants were perhaps most consistently negatively impacted, particularly low-income tenant groups. Many of these negative factors are practically inevitable due to general pressures exerted against residential uses by increasing land values.

Specialized stops such as the Monroe Street subway stop in the Chicago Loop may be lacking in residential impact and focus on employee or other user groups as major constituencies.

Investigations into organizational interests were limited to clearly identifiable local agencies such as redevelopment entities with clearly defined boundaries and goals, or to entities such as universities, civic agencies, municipal governments or transit companies or agencies whose participation was crucial to the proposed development scenario. Findings in terms of organizations were therefore very limited and tentative.

SOCIAL AND ECONOMIC FACTORS

Definition

Economic parameters investigated focused on monetary gains or losses expected to affect groups in the local area of the transit stop, or groups outside the local area who might be able to take advantage of new opportunities. Specific attention was paid to employment opportunities and unemployment rates, personal and family income and costs for services, land values and associated rents and taxes, and effects on markets, labor and transit costs affecting business concerns.

Social parameters were basically directed at assessing the impacts concerning local residential groups. They included activity patterns, population profiles, public services, health, housing quality and education. Quantitative indicator data and previous research were utilized whenever possible in predicting impacts, but some predictions are clearly arguable or speculative. The evaluation framework used concerning social factors led to results that are useful at the overall level, even though they may be questioned in any specific case. In line with earlier comments, the differentiation of community versus individual focus was maintained throughout the evaluation.

WATTERSON EXPRESSWAY AND SOUTHERN PARKWAY, LOUISVILLE Fig 3/3

MONROE STREET, CHICAGO Fig 3/4

WILSHIRE BOULEVARD AND WESTERN AVENUE, LOS ANGELES Fig 3/5

FAIRBANKS AND GRAND AVENUE, CHICAGO Fig 3/6

Findings

More than any other parameters, social and economic parameters were found to have strong differential impacts on different groups; to be mainly redistributive in nature rather than net improvements; and to be most positive where new activities, services, or improvements could be added without disrupting existing contexts. For example, in all proposals at the Wilshire Blvd. and Western Avenue Stop in Los Angeles, major commercial retail and office development was expected to have a positive impact for visitors, surrounding businesses, shoppers and employees, while negatively impacting existing area residents and businesses to be relocated in social and economic terms. At the same site, increased economic activity supported by the transit system, and its resultant impacts on employment, and business concerns, will probably relocate growth patterns and employment patterns from other locations along Wilshire or around the city in their search for location opportunities provided. At the Fairbanks and Grand stop in Chicago, a similar redistribution is clear in terms of social and economic characteristics. New residents in major high-rise residential construction are expected to be of a higher education and income range than the current residents, indicating an improvement on many social and individual economic statistics, indicating an improvement in the local area or neighborhood. The new construction, however, does not improve the income or education of individuals, however, so the changes indicate population shifts rather than net improvement.

Net improvements are projected only for significantly underdeveloped areas, such as Valley Station in Louisville where both infilling the existing fabric and provision of needed services are expected to provide improvements in social parameters without disruption costs.

ENVIRONMENTAL FACTORS

Definition

These parameters have been defined to include both natural environmental and man-

VALLEY STATION ROAD, LOUISVILLE Fig 3/7

made environmental characteristics including air quality, water quality, noise, historical sites, aesthetics, open space, and infrastructure elements such as utilities, streets and pedestrian ways. Again, qualitative indicator data and previous research findings have been utilized wherever possible in predicting impacts. Evaluation of these parameters, particularly natural environmental parameters, is often critical to project approval (i.e., Environmental Impact Statements) and should be considered in much more detail in actual applications.

Findings

To the degree that transit and more efficient land use relationships with transit reduces auto dependency, environmental benefit could be substantial as compared to business as usual development. On the other hand, local (limited to before and after development adjacent to transit stops) natural environmental impacts were negative at all sites. The boundary of the environmental problem becomes an issue from the moment that a passenger uses a parking lot adjacent to a transit stop to park his car while he takes transit downtown. Overall environmental pollution and congestion are reduced. The localized situation, on the other hand, increases in pollution and congestion. Localized natural environmental impacts varied inversely with the degree of existing development, and directly with the scale of new developments. That is, largest localized negative impacts are projected with larger projects and more undeveloped areas, for example, Wilshire and Western and Buechel/GE stops respectively. Positive impacts on the man-made environment were related to upgrading or infilling infrastructure elements; removal of blighting or hazardous structures, and preservation of historical or amenity characteristics. Strongest net positive environmental impacts were projected for redevelopment type situations, where natural environmental impacts were very small, and man-made environmental improvements were positive.

MOBILITY/ACCESSIBILITY EVALUATION

Definition

These parameters related to Value Capture are clearly linked to impacts of the overall transit system. Value Capture instruments and stop related developments, however, are seen to affect mobility and accessibility by supporting overall transit ridership by providing modal interchange and by improving local movement opportunities. Attention was focused, by and large, on aspects of stop proposals which provide a draw or barrier to transit users, which provided park-and-ride, mixed mode facilities which concentrated transit related uses near the stop, or which affected local movement patterns.

Findings

The application of Value Capture Policy was found to have a definite positive effect on access and mobility which added to the potential of the overall system. Shared parking facilities, frequently with different peak load situations allowing increased overall utilization factors, and stop related retail commercial, office and institutional uses provided in a structurally related manner were seen to be extremely effective in supporting overall transit goals. Coordination of various transit programs and provision in some cases of upgraded facilities contributed additional improvements.

For example, at the stop at Watterson Expressway and Southern Parkway in Louisville, improved crosstown interchange capabilities, local facilities providing a draw for neighborhood use of transit, some provision of transit related parking, upgraded transit facilities quality, and concentration of higher density uses in close proximity to transit were seen to all improve access and mobility without disrupting any local patterns or even increasing traffic congestion.

REDISTRIBUTION/NET GAIN CONSIDERATIONS

Definition

Effects of redistribution were seen to include both direct and induced effects, as well as being deeply enmeshed in the combined effects of Value Capture, the transit system impacts themselves, and free market processes.
The inability in this research to study the overall transit system or the overall city or regional market processes severely inhibited the ability to clearly analyze redistribution effects, so they are in general, more speculative in nature than other parameters.

Earlier discussion of redistribution issues in PART 2, ISSUES outlines most of the overall considerations, so the focus of findings at the parameter level is based more on application of overall concepts to the stop level situations.

Findings

Social and economic community design effects were seen to be generally redistributive in nature while environmental and access and mobility changes were more often resultant in net changes. This is basically due to the fact that economic and social characteristics are generally related to people who are to a large degree substitutable and relocatable, while environmental and access/mobility parameters are related to elements which are more fixed in space and time. In addition, more unique or isolated situations such as Valley Station in Louisville or Watts in Los Angeles, were seen to be more likely to incur net changes than more typical or interchangeable areas such as Wilshire and Western in L.A., which shares many features with other stops along Wilshire Boulevard or elsewhere in Los Angeles. A final aspect of net gain which effects all situations is the ability to produce net gains in efficiency or quality through the coordination of land use and transportation activities, which in most cases is clearly beneficial, but speculative in terms of degree of impact.

LONG RANGE/SHORT RANGE CONSIDERATIONS

Definition

Significant differential impacts at the stop level result across direct or induced changes through time. Even in terms of attitudes, which were not dealt with in depth in this report, past work indicates that significant stages occur due to announcement of the system, construction, opening of facilities and adjustment to effects. Particularly important here is the consideration of relocation, which is in many cases the most important short run effect, yet of minor importance in the long run. Due to the long time frame; the variety of influences, particularly on induced effects; and the sparsity of previous longitudinal studies, findings concerning these parameters are again highly speculative.

Findings

Key short range impacts were due to relocation and construction effects of congestion, noise, and water and air pollution. Effects are directly related to the scale of new development and inversely related to the degree of existing development. Long range effects

103rd STREET AND GRAHAM, LOS ANGELES Fig 3/8

are directly related to net gain considerations considered earlier.

Long range effects are also related to their role in overall area strategies, where they exist, as in redevelopment areas. Here, the appropriate timing and role of key public investments related to Value Capture can be of significant importance. As with several other parameters, effects often hit current residents and businesses hardest while being most beneficial to parties outside the local area.

OVERALL EVALUATION FRAMEWORK

Except in cases where differential effects are minimal and changes are generally in the same direction, an overall Community Enhancement figure cannot be derived by analytical considerations alone. As a result, evaluation is presented separately for different parameters. The final analysis of the results is dependent on the values and goals of the entity applying Value Capture on legal and political processes, and on comparison with financial evaluations. As noted in PART 2, ISSUES our approach to this situation has been to develop and fully illustrate specific projects. These are fully reported upon in PARTS 4, 5, 6, and 7.

In general, however, it can be said that there will be both local and widespread community impacts; that they are in general mixed in value; that they are of differing qualitative and quantitative importance to different groups; and that impacts vary depending on specific Value Capture techniques employed.

Part 4 Methodological Notes

Synopsis

This PART introduces key aspects of the tools and methods used in approaching the legal, financial, and community design concerns for Value Capture as it applies to the three cities. Legal issues were identified and brought into focus through the use of interviews, financial parameters through pro forma cash flow analysis, and community design through the development and use of objective performance indicators.

4a Legal

The following interview was administered to local experts in the three cities and serves as one of the tools used to identify legal constraints to Value Capture applications. These questions were carefully selected to focus upon fundamental legal underpinnings for Value Capture and represent a usuable checklist for other interested municipalities.

Supplemental Condemnation

Do the courts in your jurisdiction require a legislative body's determination that the power of eminent domain (condemnation) will be exercised for a public use, or do they presume, absent fraud or gross abuse of power, that such a legislative determination is sufficient?

(a) Any case so stating?

(b) If so, do any apply to the transportation field? To parking areas?

Are there any precedents in your jurisdiction, and/or can you think of any constraints upon the use of excess or supplemental condemnation to acquire a transit stop, in order to help the transit authority recapture for the public some of the public expenditure made to create the stop, or the transit system generally? What about:

(a) Condemnation of property reasonably essential to the successful operation of a district or facility? Could a transit district or industrial district acquire real property and lease/sell to a private party to engage in related enterprises necessary for its operations? For its fiscal success? To make it financially self-sufficient? To return construction costs? Examples of such facilities might be port-related industry or commercial or job-related ventures around a transit stop.

(b) Condemnation of property reasonably required for future use by the entity involved? (i.e., school districts? highway commissions?) How far in advance of need may an entity acquire real property? Is a plan or other such evidence generally necessary to justify such advance acquisition? Are there any restrictions on what can be done with such property once acquired if the "future need" does not materialize?

(c) Condemnation of remnant property? Size limitations? Can a piece of property much larger than what is required for the project, but much less expensive, be acquired on the ground it is a "financial" remnant? (i.e., People v. Superior Court of Merced County, 436 P.2d 342 1968).

(d) Condemnation of real property as a buffer, to "protect" the entity involved? (i.e., a buffer around a reservoir?)

(e) Condemnation to recoup costs--either of construction or land acquisition--of the particular project? (As in New York World Trade Center, where part of structure would be leased to commercial ventures to generate revenue for repayment of costs--Courtesy Sandwich Shop case.)

What is the rule in your jurisdiction with respect to the disposition of "surplus" real property acquired by eminent domain but no longer needed for the purpose originally required?

(a) Are there certain procedures which must be followed for disposition?

(b) Are there conditions (no-lease, no-sale to private parties, etc.) with respect to disposition? Restrictions on money received from dispositions?

Are there conditions which would restrict a public entity like a transit district which would preclude "dealing" in land or "dealing with private parties via leases", etc.?

(a) Must the public entity retain a degree of control over the land or buildings say, with respect to rents, tenants, etc.?

(b) Must the district or public entity be proceeding in accordance with a formal plan of any sort? (i.e., HUD requirements for housing.)

Are there any examples, cases or statutes in your jurisdiction which give authority to highway authorities, housing authorities, etc., to condemn land for, say, gas stations and restaurants along highways?

Do you see any bars to the use of supplemental condemnation in any of the above categories for the acquisition of land for a rapid transit district for the following uses:

(a) Surface parking around the transit stop.

(b) A parking structure around the transit stop.

(c) Parking plus supplemental services along the transit stop.

(d) Structures for housing, commerce or industry that would be helpful for the viability of the particular stop or the transit district as a whole.

Monetary Transfers

Are there any constitutional or statutory bars to the use of special benefit assessment procedures to assess property owners for value which may accrue to their parcels due to the location of a transit stop?

(a) What is the rule in your jurisdiction with respect to the set-off of general and special benefits to remaining property, against damages at the time of condemnation?

(b) Is there a limit upon the degree of "public benefits" which would flow to the public from a particular project, in order to permit some form of public benefit assessment in your jurisdiction?

(c) What kinds of evidence, if any, would be necessary to demonstrate the conferring of a "special benefit"?

(d) What procedures are there in your jurisdiction to create a special benefit assessment district?

(e) Have the statutes in your jurisdiction permitted such a special benefit assessment district to be tested in court?

Air and Subsurface Rights

Does the city (or other municipal corporation) automatically obtain air or subsurface rights when it exercises the power of eminent domain for valid public purposes? If so, must it utilize these rights for the same purposes?

Can a municipality or other public body use air or subsurface rights for parking? Government buildings? Lease or sell to private interests for commercial or industrial purposes?

Has there been an attempt in your jurisdiction to require a city to acquire less than a fee simple ownership, if it would suffice, for a public purpose? (i.e., could you argue that since only the surface of land is needed for a fixed-guideway transit stop or railway, the city cannot condemn air/subsurface rights or that these rights don't automatically flow to the condemnor with the right it needs to effectuate a valid public purpose.)

Intergovernmental Cooperation

What experience is there in your jurisdiction with:

(a) The joint venture between public bodies.

(b) Interlocal agreements.

(c) Joint development districts.

Has there been any experience with respect to the pooling of governmental powers so that, say, a housing authority, school district and transit district might join forces to see that land around a transit stop were utilized for a junior college and a moderate-low-income housing project?

4b Financial

OVERVIEW

This section discusses background assumptions behind the development cash flow computer model used in pro forma analysis of each stop example. Certain assumptions are

global to this analytical process, and thus should be clarified before results are presented.

THE CASH FLOW MODELING PROCESS

Cash Flow Analysis for different development scenarios presents a viable tool for estimating, measuring and evaluating costs and returns to the participants involved.

In modeling the cash flow for real estate development, the modeling process must respect the two different transactions which generate cash. These transactions are SELLING and LEASING real estate and related developed real property. Furthermore, TAXATION is also considered in relation to specific site related development parcels. Normally, this technique would not apply to the private entrepreneur's development considerations, but since Value Capture focusses on the public's role in the development process, taxation has been included in the stop analyses.

To discover and illustrate Cash Flow effects of different development scenarios, a computer program has been developed which allows for analysis of the following:

1) development and holding of properties for income producing purposes.

2) development and sale of properties at some future date.

3) leasing of land or development rights.

4) sale of land or development rights.

5) ad valorem taxation of development properties.

6) increment tax financing of development properties.

This computer program models the flows of dollars through time for a given parcel of property and related developed real property. Each scenario has an associated land use program and can accommodate any mix of uses. This land use program represents certain costs and is a potential source of income. In respect to these costs, the program analyzes a project in the exact same terms followed by a real estate developer/entrepreneur (or public agency doing Value Capture).

INPUT ASSUMPTIONS

For any development entity, certain assumptions must be carefully considered and monitored during project development to effect a successful investment and to create income. These factors are inputs to the Computer Program and include such items as specific development and operation costs for each land use and assumptions about cost of capital, method of capitalization, rate of capitalization, term of development project, and cost of land and demolition.

For each land use the model assumptions include the following:

DEVELOPMENT COSTS - This is the development organization cost per unit of the land use and is depreciated over the life of the land use.

SITE COSTS - The dollars per unit of the associated land use required for site preparation. This does not include parking facilities. These are considered separate land uses.

START UP COSTS - This is the number of dollars per unit to start up development for the associated land use.

CONSTRUCTION COSTS - The cost per unit of construction for a land use.

DEPRECIATION - The depreciation method used to compute depreciation for the land use must be either straight line, 150% declining balance, double declining balance, or sum-of-years' digits. (Coded 1,2,3,4, respectively in data print out.)

ECONOMIC LIFE - Economic life in years of structures developed assumed for computation of depreciation.

% LEASEABLE - This is the percentage of the development land use which will produce rental revenue.

RENT INCOME - The annual total gross rental per unit of land use is given for each land use.

OPERATING COSTS - The annual costs of operations per unit of land use is given for each land use.

Figure 4/1 displays assumptions made for each land use by city for this research.[1]

LOS ANGELES:

	$DEVEL	$SITE	$STRUP	$CONS	DEPREC	ECOLIF	%LEASE	$RENT	$OPER
NEIGHBRHC COMMERCIAL	7.13	1.58	2.90	26.40	2.00	30.00	85.00	6.16	2.17
COMMUNITY COMMERCIAC	5.68	0.65	2.56	28.42	2.00	30.00	75.00	7.73	2.27
REGICNAL COMMERCIAL	8.01	0.72	2.91	36.42	2.00	30.00	75.00	8.82	3.01
EDUCATICNAL INSTITN	3.81	3.12	0.69	34.68	2.00	45.00	100.00	6.89	5.41
PUBLIC INSTITUTICNAL	1.82	3.27	0.73	36.30	2.00	50.00	100.00	4.05	3.32
PUBLIC INSTITUTIONAL	1.82	3.27	0.73	80.00	2.00	50.00	100.00	4.05	3.32
STRUCTURED PARKING	2.91	1.91	0.97	13.85	2.00	40.00	100.00	7.26	2.99
GRADE PARKING	0.13	0.31	0.00	2.20	2.00	20.00	100.00	1.21	0.49
HOTEL	6.25	1.65	7.57	32.91	2.00	45.00	80.00	19.85	13.70
HIGH RISE APARTMENTS	6.45	1.34	0.54	26.90	4.00	45.00	90.00	6.02	4.08
MID/HIGH RISE OFFICE	7.12	4.41	1.01	33.50	2.00	45.00	90.00	6.63	3.94
HIGH RISE OFFICE	8.70	5.39	1.24	41.44	2.00	45.00	90.00	6.89	4.17

LOUISVILLE:

	$DEVEL	$SITE	$STRUP	$CONS	DEPREC	ECOLIF	%LEASE	$RENT	$OPER
NEIGHBORC COMMERCIAL	4.95	1.10	2.01	18.35	2.00	50.00	85.00	5.27	1.53
COMMUNITY COMMERCIAL	5.30	0.79	2.38	26.52	2.00	50.00	80.00	6.72	2.63
PUBLIC INSTITUTIONAL	1.50	2.70	0.60	30.04	2.00	50.00	100.00	3.50	3.05
STRUCTURED PARKING	2.72	1.50	0.76	10.89	2.00	40.00	100.00	2.85	2.14
GRADE PARKING	0.12	0.28	0.00	2.04	2.00	40.00	100.00	0.85	0.48
STD.GARDEN APT.	4.57	0.95	0.38	19.13	4.00	40.00	100.00	2.46	1.03
SUBURBAN LOW OFFICE	5.72	3.54	0.81	27.23	2.00	45.00	90.00	6.48	4.21
LOW RISE OFFICE	8.93	5.53	1.28	42.50	2.00	45.00	85.00	6.31	4.10
MID RISE OFFICE	7.14	4.42	1.02	34.02	2.00	45.00	90.00	6.29	4.08

CHICAGO:

	$DEVEL	$SITE	$STRUP	$CONS	DEPREC	ECOLIF	%LEASE	$RENT	$OPER
NEIGHBORHC COMMERCL.	6.99	1.56	2.85	25.91	2.00	50.00	85.00	5.59	1.97
COMMUNITY COMMERCIAL	4.81	0.73	2.19	24.39	2.00	50.00	80.00	6.14	1.80
REGICNAL COMMERCIAL	7.85	0.71	2.86	35.70	2.00	50.00	75.00	8.01	2.73
PUBLIC INSTITUTIONAL	1.37	2.48	0.00	27.57	2.00	50.00	100.00	4.22	3.39
HEALTH INSTITUTICNAL	11.32	7.54	1.61	53.92	2.00	45.00	90.00	6.20	5.32
PUBLIC INSTITUTIONAL	1.37	2.48	0.00	80.00	2.00	50.00	100.00	4.22	3.39
STRUCTURED PARKING	2.85	1.57	0.80	11.43	2.00	40.00	100.00	6.92	2.75
HIGH RISE APARTMENTS	6.32	1.31	0.52	26.37	4.00	45.00	100.00	4.85	2.44
MEDIUM RISE OFFICE	6.97	4.32	0.99	33.22	2.00	45.00	85.00	6.69	4.48

Figure 4/1 LAND USE DEVELOPMENT ASSUMPTIONS

For each development scenario, the following assumptions were made. Note that these vary by type of technique analyzed and are noted by the following initials: develop-hold/sell - (D), land-leasing/sale - (L), taxation - (T).

DEVELOPMENT USES - The number of development land uses considered in this run of the model. (D,L,T)

NUMBER OF YEARS - This is the number of years for which output will be produced. This must be between 1 and 25. (D,L,T)

NUMBER OF PARTNERS - The number of participants is specified. This must be from 1 to 10. (D)

YEAR OF SALE - If project is sold in development scenario, this specifies the year of sale. (D,L)

% VACANCY - This is the global vacancy rate assumed for the development project (across all land uses). (D,L,T)

CAPITALIZATION RATE - The value of money is given as a capital rate for computing the value of a constant payment every year. (D,L,T)

LAND COST - This specifies the $/square foot cost for land purchased in the project development. (D,L,T)

PARCEL SIZE - The parcel size of the development site is assumed in thousands of square feet. (D,L,T)

DEMOLITION COSTS - Any costs for necessary demolition are included in total dollars. (D,L)

% ASSESSMENT RATIO - The assumed relationship between fair market value of property and the assessed value for tax purposes. (T)

AD VALOREM TAX RATE - The tax rate for the administrative entity assumed. (T)

INCREMENTAL TAX RATE - The total tax rate for the participating taxing jurisdiction in a special district as defined by the project parcels. (T)

IMPROVEMENT VALUES - The total assessed value of improvements existing on the site before development begins. (T)

For each scenario tested, it is possible to provide assumptions for each of 1 to 10 partners:

% SHARE - This is the share of interest in the development held by the associated participant, expressed as a percentage. (D)

MORTGAGE TO VALUE RATIO - This is the percentage of the value of the development which can be financed by a construction mortgage. (D)

MORTGAGE TERM - The term is the number of years for which the mortgage runs. (D)

LONG TERM INTEREST RATE - This is the percentage paid on the first mortgage. Note that this may represent long term capital from bond sales as well. (D,L)

% RECAPTURE @ SALE - If project is to be sold, this gives the percentage of excess depreciation taxable at ordinary tax rates. (D,L)

% COMMISSION - If project is sold, this specifies the percentage of sales price paid as commission to the selling agent. (D,L)

$ EQUITY PAID - This represents an assumed payment of equity to be paid by the developer. Note that on bond financing, no equity is assumed. (D)

TAX RATE - The tax rate for each participant applies to his ordinary income. (D)

CAPITAL GAINS RATE - The capital gains rate for each participant applies to his portion of profit subject to recapture. (D)

The development program is specified for each scenario in total square feet for each land use. Note that parking is treated as an independent land use. Figure 4/2 presents the model's output of these assumptions. For example; develop/hold, land lease, and taxation options, respectively:

```
*********************

DEVEL HOLD  CED 2
DATA FOR THIS PART
*********************

DEVEL.USES          3
NO.OF YEARS        25
NO.OF PARTNR        1
YEAR OF SALE       30

% VACANCY        5.00
CAP. RATE        9.80
MORT:VAL.RTO   100.00
MTG.TERM        25.00
% L.T. INTRS     6.00
% RECAP@SALE   100.00
% COMMISSION     5.00
$EQUITY PAID    0.00
LANDCOS.$/SF    8.34
KSF PAR.SIZE   44.00
$ DEMOL.COST   85.00

FOR EACH PARTNER:

PARTNER NO.         1
% SHARE       100.00
% INCOME TAX     0.00
% CAP.GAINS      0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI   8750.
STRUCTURED P  49000.
COMMUNITY CC  17500.
```

```
*********************

LAND LEASE  CED 2
DATA FOR THIS PART
*********************

DEVEL.USES          3
NO.OF YEARS        25
YEAR OF SALE       30

% VACANCY        5.00
CAP. RATE        9.80
% RECAP@SALE     2.00
% COMMISSION     5.00
% L.T. INTRS     9.00

LANDCOS.$/SF    8.34
KSF PAR.SIZE   44.20
$ DEMOL.COST    0.00

DEVELOPMENT PROGRAM:

COMMUNITY CC  42000.
MID RISE OFF 160000.
STRUCTURED P 282800.
```

```
*********************

INC.TAX FINANC  CED3
DATA FOR THIS PART
*********************

DEVEL.USES          3
NO.OF YEARS        25

% VACANCY        5.00
CAP. RATE        9.00
LANDCOS.$/SF    8.34
KSF PAR.SIZE   44.20

% ASSES.RTO.    89.00
ADVAL.TAX RT     0.00
INC.TAX RATE     1.64
IMPR.VALUE $   150.00

DEVELOPMENT PROGRAM:
COMMUNITY CC  42000.
MID RISE OFF 160000.
STRUCTURED P 282800.
```

Figure 4/2 INPUT ASSUMPTIONS

OUTPUT

Three output schedules are produced by the model for the develop/hold, land lease, and taxation options, respectively. These are discussed individually.

Develop/Hold:

PREVIOUS EQUITY ASSUMED - This presents original equity assumptions for the project.

COMPUTED EQUITY - This is the result of the computation of total project development costs less total amount of mortgage. (This number is always used in debt service calculations.)

TOTAL COST OF PROJECT - This is the total development costs of project including start up, development costs, construction costs, and site development costs.

OPERATING INCOME - This is the amount of rent income after allowance for vacancy, less operating expenses. RENT INCOME, %LEASEABLE, %VACANT, and OPERATING COSTS are employed in its computation.

FIRST MORTGAGE - After these headings, details are given about the mortgages provided for in the model. Computations are based on the computed economic value. LONG TERM INTEREST RATE, and MORTGAGE TERM, respectively, are employed in the computations.

AMORT - Amortization
The portion of the constant debt service which goes toward amortizing the principal is shown here.

INTEREST - This is the amount of the constant payment which goes to pay interest charges.

DEPRECIATION - This entry shows the total over all buildings (land uses, technically) in the building program of the depreciation. It is based on building cost and the specified depreciation method.

TAXABLE INC.- Taxable Income
Taxes are based on operating income less depreciation and interest expenses.

TAX BENEFIT - This is the total amount paid by all participants in tax. Each participant's tax is based on his share and tax rate (%SHARE and TAX RATE).

ROR (CASH) - Rate of Return of Cash
This is the ratio of cash flow after taxes to cash equity invested. Equity is assumed to be the difference between project cost and total amount of mortgages. This return is specific in that it relates to the cash put into the investment, net of mortgages and the cash the investment pays out after deducting debt.

PRETAX C.F. - Pretax Cash Flow
Cash Flow before paying taxes is operating income less total debt service payments.

CFAT - Cash Flow after Taxes
Tax payments are deducted to arrive at the cash retained after payment of income taxes. This calculation indicates net income or Dollars generated by a development scenario.

PART. CASH ROR - Participants' Cash Rate of Return - Like the overall figure described above, the ratio of each participant's cash flow after tax to his share of equity is given here.

PART. FREE & CLEAR INCOME - The participants' shares of operating income are shown here.

INTERNAL RATE OF RETURN - This rate of return is a percentage that when applied to all future cash inflows, discounts them to a present value exactly equal to the present value of the total cash outflow.

****

DEVEL HOLD CBD 2 --- INCOME ANALYSIS ($ X 1000)

****

PREV.EQUITY ASSUMED: 0. COMPUTED EQUITY: 0.

TOTAL COST OF PROJ.: 2147. COMPUTED MOR-VAL RTO. 100.00

PERIOD	1	5	10	15	20	25
OPER INCOME	75.4	102.6	150.8	221.5	325.5	478.3
FIRST-AMORT	39.1	49.4	66.1	88.5	118.4	158.4
INTRST	128.8	118.5	101.8	79.5	49.5	9.5
DEPRECIATION	56.7	49.4	41.6	35.0	29.5	24.9
TAXABLE INC	-110.1	-65.3	7.4	107.0	246.4	443.9
TAX BENEFIT	0.0	0.0	0.0	0.0	0.0	0.0
PRETAX C.F.	-92.5	-65.3	-17.2	53.6	157.6	310.4
C.F.AFT TAX	-92.5	-65.3	-17.2	53.6	157.6	310.4
ROR (CASH)	0.000	0.000	0.000	0.000	0.000	0.000
ROR(CASH) PARTNER- 1	0.0	0.0	0.0	0.0	0.0	0.0
INC.-F&C PARTNER- 1	75.4	102.6	150.8	221.5	325.5	478.3

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 4.050 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 7.700 %

Figure 4/3 DEVELOP/HOLD: TYPICAL OUTPUT

Figure 4/3 presents a typical develop/hold analysis output: Note that period represents development year numbered as shown and results represent cash flow during that development year.

Land Lease/Sale:

TOTAL COST OF PROJECT - Same as develop/hold option. Note this includes only cost of site purchase and clearance.

LEASE INCOME - Computed income from long term lease holds using the land residual technique for computation.[2]

REVENUE AT SALE - If land is sold this is the total selling price.

TOTAL TAXES - includes all taxes from sale in accounting period of sale.

EXPENSE OF SALE - sales commission paid to selling agent. This does not include closing costs.

PROCEEDS AFTER TAX - Net income from sale, revenue at sale less total taxes and expense of sale.

INTERNAL RATE OF RETURN - (see develop/hold).

****

LAND LEASE CBD 2 --- LAND LEASE/SALE ANAL.($ X 1000)

****

TOTAL COST OF PROJ.: 369. (INCL. ACQ.+ CLEAR. ONLY)

PERIOD	1	5	10	15	20	25
LEASE INCOME	84.3	84.3	137.4	215.4	330.0	498.4
REV AT SALE	1154.3	1154.3	1696.1	2492.1	3661.7	5380.2
TOT TAXES	0.0	0.0	0.0	0.0	0.0	0.0
EXPN OF SALE	57.7	57.7	84.8	124.6	183.1	269.0
PROC AFT TAX	1096.2	1096.6	1611.3	2367.5	3478.6	5111.2

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 39.880 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 36.750 %

Figure 4/4 LAND LEASE: TYPICAL OUTPUT

Taxation:

TAX BASE TOTAL - This is the total estimated tax base for the area prescribed by the development parcel size.

AD VALOREM TAXES - The result of applying the ad valorem tax rate times the estimated tax base.

INCREMENTAL TAX BASE - The resulting net change in total tax base resulting from assessment of the development program tested.

INCREMENTAL TAXES - The result of multiplying the incremental tax rate times the incremental tax base. Note that this is total tax revenue derived from the development area and one should note that, in most jurisdictions, any excess of these revenues over and above the amount needed for debt service by the development entity will revert to the taxing jurisdiction.

****

INC.TAX FINANC CBD3 --- TAXATION ANALYSIS ($ X 1000)

****

PERIOD	1	5	10	15	20	25
TAX BASE TOT	4775.8	6497.4	9546.9	14027.6	20611.0	30284.4
AD VAL TAXES	0.0	0.0	0.0	0.0	0.0	0.0
INC TAX BASE	4314.2	6035.9	9085.3	13566.0	20149.5	29822.8
INCR TAXES	70.8	99.0	149.0	222.5	330.5	489.1

Figure 4/5 TAXATION: TYPICAL OUTPUT

Combined Total Cash Flow:

This represents the bottom line of the cash flow model. One or more development scenarios may be tested using the model, then the resulting net cash flow from each are summarized by the model and presented in the output depicted in Figure 4/6.

The net present value of the total project is computed for the last year of the project analysis or the year of sale of project, which ever occurs earliest in time. A range of rates of return of discounting the cash flow are presented with corresponding net present values computed using the respective rate. Note all dollar totals shown by the model are in thousands of dollars.

****

CCMB. TOTAL CASH FLOW ($ X 1000)

****

PERIOD	1	5	10	15	20	25
DEVEL HOLD CBD	-92.5	-65.3	-17.2	53.6	157.6	310.4
LAND LEASE CBD	84.3	84.3	137.4	215.4	330.0	498.4
ANNUAL CASH FLOW	-8.2	19.0	120.2	269.0	487.6	808.8
ACCUMULATED CASH	-8.2	24.3	521.6	1714.2	3928.2	7643.1

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	7643.	3263.	2766.	2389.	2056.	1777.

Figure 4/6 CASH FLOW SUMMPAY: TYPICAL OUTPUT

4c Community Design

Issues/Community Design Evaluation Process

Two basic forms of evaluation research have been applied to situations similar to those faced by this research: use of objective indicators,[3] and use of survey research methods.[4] From a review of the literature, it appears that the indicators approach has several major advantages. It is more easily generalized to a variety of cities and situations; it places reliance on utilization of census, health, crime, and other available data sources; it is efficient in the time and resources necessary to acquire data; it is amenable to quantitative measurement; it provides useful data for design as well as analysis; it can provide immediate input into research; and it is relatively easy to up-date in terms of long-range evaluation. This approach cannot, however, provide any direct information on how people feel about, or perceive the impacts of change. In addition, the indicator techniques are much more rigid and less easily adapted to open-ended inputs and changes in priorities. Finally, the indicator approach must rely heavily on previous survey or other research to establish the reliability of, relative importance of, and linkages between indicators.

Survey research methods, by comparison, are considerably more expensive and time consuming, but provide results which are more open-ended, more direct, more directly related to individual attitudes and goals, and require less interpretation. In addition, they are expensive to update, difficult to use to monitor changes, and more difficult to compare between locations.

For the purposes of this research, the use of objective indicators was seen to have real merit in application to community design evaluation, both in specific planning contexts, and in the pursuit of specific goals.

The Community Design Evaluation Procedure

The Community Design evaluation process used in this work focusses on a series of parameters which describe different types of community impacts. These include parameters such as economic well-being, social factors, and the stability of natural environment. These factors are measured by a series of demographic and physical statistical indicators which establish the current status of the community and are used to monitor or measure changes in the community.

The evaluation process then proceeds to document program and design elements or physical modifications to a community which are the result of a specific application of Value Capture. From these elements, design impacts, or net changes in the community are predicted, based on previous research, rules of thumb, or logical relationships. The design impacts are finally compared with indicators of the current community context to estimate their impact on various Community Design parameters.

Following this, the impacts are then interpreted in terms of the values and goals of various organizations and constituencies affected.

Constructing the Evaluation System

Parameters included in the current process have been determined based mainly on previous quality of life (Q.O.L) research and economic theory.[5] These factors primarily reflect residence based impacts.

There is, as yet, limited work documenting the importance of the physiological or psychological bases of these factors.[6] As a result, the current system can at best evaluate and rate the impact on the various factors. It cannot evaluate the psychological or physiological impacts on the overall well-being of the individuals affected.

Some parameters in the evaluation process are related in a more or less direct one-to-one manner to established indicators. Others are less capable of direct measurement, and a combined evaluation of several indicators is required to adequately describe the parameter. In all cases, choices of indicators have been limited by availability of accessible data sources, and their levels of spatial or conceptual aggregation. A particular issue in data availability, for example, is the frequency of updating. In the current work, the long implementation time allows use of census data with a ten year updating period, as opposed to situations in which more current data is a prerequisite. As work progressed, efforts were made to eliminate redundant, unreliable indicators, or indicators for which data was unavailable.

A final criteria in the selection of indicators was the need to provide adequate distinctions between various situations and impacts. This led to a focus on parameters most clearly related to specific elements of Value Capture, rather than on a general evaluation system.

Following identification of parameters and indicators, a baseline profile of each community was established. This baseline data was determined from available sources and used to suggest goals to be reflected in design strategies.

Following the study of possible stop-related actions, development scenarios were stated in terms which allowed tentative prediction of their design impacts. Particular emphasis was placed upon establishing units of development, for example, number of square feet of office space or number of employees, which are comparable with units used in financial analysis, and which are adequate to predict impacts.

Next, it was necessary to predict the impact of the various design elements on the indicators used to measure Community Design factors. In this area, there has been a great deal of recent study, but few definitive conclusions. Even the evaluation of completed facilities leaves many unanswered questions.[7] Clearly, even a comprehensive survey of the existing literature was beyond the scope of this work. Where possible, however, key impacts were viewed in light of major research findings.[8]

A couple of problems in predicting impacts are worthy of mention. In all cases, there is a difficulty in assigning impacts to particular aspects of Value Capture, related designs and programs, or peculiar design features of the specific solution. At times, the effects of a small scale feature such as building orientation or parking access may screen or negate the impact of larger scale elements.

At the same time, there are vast differences in the types of effects and ability to predict them across the many key factors involved in Community Design. The fact, for ex-

ample, that more quantitative tools have been developed for predicting changes in mobility and accessibility than for changes in social and political factors should not be allowed to influence the overall analysis.

Following the estimations of the direction of impact and some feeling for overall magnitudes of impact, the changes were interpreted in terms of available information on the values and goals of various organizations and constituencies affected.[9] In some cases, it will be seen that various groups interpret the exact same impacts quite differently. In the following presentation of illustrative stop applications of Value Capture, a review of findings on each major parameter is presented, including predicted changes in indicators, and interpretation of these changes in view of the interests of the parties affected in the local context.

The overall Community Design evaluation process is illustrated in the following diagram, figure 4/7. On the succeeding pages, basic parameters, organizations and constituencies and indicators are listed.

COMMUNITY ENHANCEMENT EVALUATION PROCESS

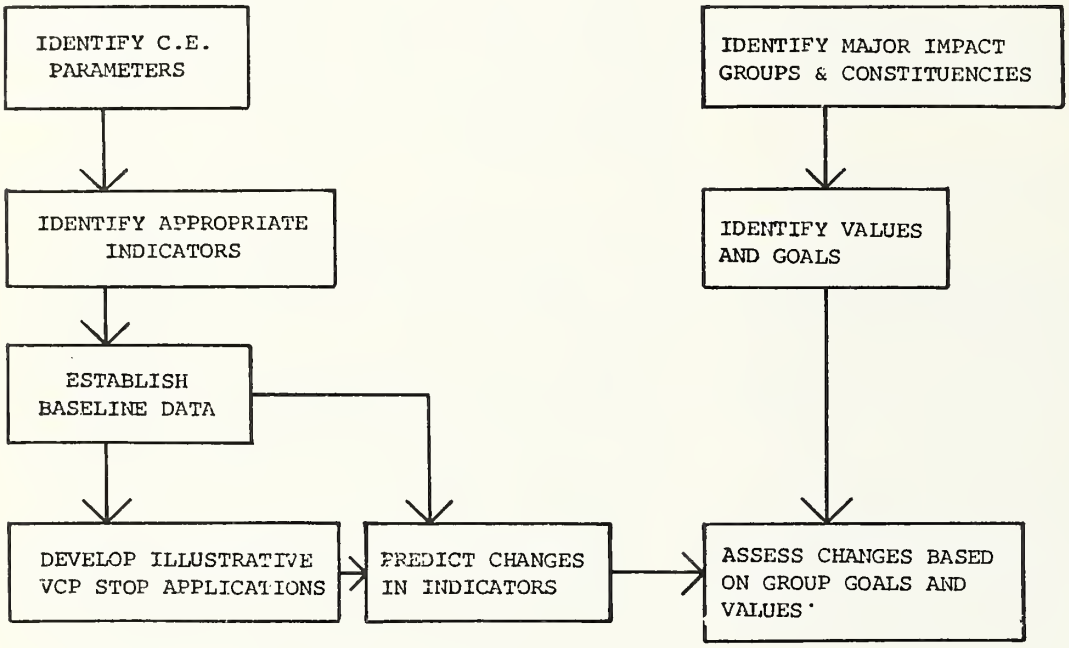


Fig. 4/7

Social-Economic Parameters

PARAMETERS	PRIMARY INDICATORS	SECONDARY INDICATORS
A. ECONOMIC FACTORS		
* 1. Employment/Unemployment	* % Labor Force Unemployed	
* 2. Income/Costs	* Median Family Income Local Cost of Living Index	
* 3. Land Value, Rents, Taxes/Insurance		* Rent as % of Income: $5,000-$9,999 Income
4. Markets/Labor Costs	No Localized Indicators Identified	
B. SOCIAL FACTORS		
1. Activity Patterns	No Indicators Identified	
2. Population Changes		% Minority, % Over 65, % Under 18
* 3. Public Services	* % Households in Poverty	
4. Equity: redistribution	No Indicators Identified	
5. Health	Infant Death Rate per 1,000 Live Births Suicide Rate per 1,000 Population	Various Disease Attack Rates and Oeath Rates
6. Crime	Robbery Rate per 1,000 Population	Major Crime Rate per 1,000 Population
* 7. Housing Quality	* % of Units with 1.01 Persons per Room or More	Median Age of Unit, Median Unit Size
* 8. Education	* % Population, 25 or over High School Graduates	* Median School Years Completed, 1970 Median School Years Completed, 1960

Environmental Parameters

A. NATURAL ENVIRONMENT		
* 1. Air Pollution	Pollutant Levels: Particulates SO_2, NO_2, etc.	* % of Tract with Air Pollution Problems
* 2. Water Pollution	Pollutant Levels: BOD_5, Coliform, etc.	* % of Tract with Water Pollution Problems
* 3. Noise Pollution	Noise Levels in db	* % of Tract with Noise Pollution Problems
* 4. Overall Pollution		* % of Tract Without Pollution
B. AMENITIES		
1. Historical Sites/Landmarks		Qualitative Data
2. Aesthetics/Visual Environment		Site Analysis
3. Open Space, Pedestrian Environment		Photographs
C. INFRASTRUCTURE		
1. Utilities	No Indicators Identified	
* 2. Streets and Structures		Aerial Photo Analysis

Mobility Accessibility Parameters

*A. LOCAL ACCESSIBILITY	Origin & Destination Oata, Time/Cost Oata	* % of Households with No Auto
B. AREA WIDE MOBILITY		% of Persons Riding Bus to Work
C. MODAL INTERCHANGE	Existing Transit User Data	

COMMUNITY IMPACT PARAMETERS

Fig. 4/8

* Actually used in analysis

The following list represents major organization and constituency groups identified during the course of this work.

ORGANIZATIONS

Governments

Municipal Governments (Tax Dept., Planning, Public Works, Parks & Recreation)
State Governments - Highway Department
Regional Government - COG's
Federal Government - EPA, HUD, HEW, DOT/FHWA

Local Agencies

Redevelopment Agencies
Housing Authorities
Transit Planning/Coordinating Agencies
Special Districts: Water, Fire, Utility, Pollution
School Districts
Service Agencies: CAP's, CD, Welfare, etc.

Citizens Groups
- Churches
- Civic Clubs/Ad Hoc Citizens Groups
- Special Interest Groups: Environmental, Public Lobbies, Chamber of Commerce, Historical Preservation

Business, Labor and Politics
- Transit Companies
- Utility Companies
- Labor Unions
- Political Representatives

CONSTITUENCIES

Resident Homeowners
Residential Tenants
Landlords/Land Owners
Employees/Employers
Shoppers/Retailers
Developers/Entrepreneurs
Elderly or Handicapped Groups
Children/Families
Pedestrians
Voters
Transit Users: Auto, Bus, Mass Transit
Users of Parks, Recreations, Religious, Service or Cultural Facilities
Students/Educators
Tourists/Visitors

Data Sources

In the 3 cities studied an attempt was made to identify data sources which reflect a wide range of Community Design factors. Where cluster analysis of demographic and physical variables was available, as in Los Angeles,[10] the results were directly useful to the evaluation, particularly in terms of aggregation of spatial units and data categories. In other cities, such as Louisville, broad data bases have been assembled on a census tract basis without further analysis.[11] Again, this type of data source can be used without major data manipulation.

Mobility and accessibility data per se is not available in detail for all study cities, but significant data was used from transit system studies.[12] Where possible, this data was selected based on Community Design evaluation rather than system engineering issues.

Natural environmental information is perhaps the most difficult to develop, often requiring the assembly of data from a large number of separate primary sources.[13] In most cases, however, the net change in environmental impacts can be measured somewhat independently of the existing values of environmental indicators. The approach taken in this work in general bypassed collection of environmental data, and developed the impacts of proposed development without reference to the existing quality levels.

Only when necessary was reference made to census data[14] or other primary data sources which are both limited in scope and time consuming to analyze. It was kept in mind, however, that these sources are always available, and they were utilized where applicable.

Supplementary data was collected by interviews with knowledgeable city figures,[15] site visits including notes and photographs, development of aerial photographs and collection of relevant local reports[16] concerning study areas.

Notes

1. Development assumptions are based on information adapted by Rice Center from the following sources:
   Office:
   Building Owners and Managers Association International, 1975 Office Building Experience Exchange Report, and Rice Center estimates.
   Commercial:
   Urban Land Institute, Dollars and Cents of Shopping Centers: 1975, and Rice Center estimates.
   Transient Residential:
   Harris, Kerr, Forster, and Company, Certified Public Accountants, Trends in the Hotel-Motel Business, 1975, and Rice Center estimates.
   Housing:
   Institute of Real Estate Management of the National Association of Realtors, A Statistical Compilation and Analysis of Actual 1975 Income and Expenses Experienced in Apartment, Condominium, and Cooperative Building Operation, and Rice Center estimates.
   Institutional:
   Rice Center estimates.
   Parking:
   Rice Center estimates.
   All Construction Costs:
   All Cost Data and Multipliers, dated March 1975: F.W. Dodge Corporation, Construction Cost Calculator and Valuation Guide, June 1975, New York.

2. Computational procedure follows that discussed by H. Robert Mande, New York, Real Estate Consultant and Appraiser in F.W. Dodge Corporation, Construction Cost and Valuation Guide, 1974 edition.

3. Hornback, Kenneth, E.; Guttman, Joel; Himmelstein, Harold L.; Rappaport, Ann; and Reyna, Roy, Studies in Environment, Volume II, Quality of Life, Washington, D.C., U.S. Environmental Protection Agency, 1973.
Jones, Martin, V., and Flax, Michael J., The Quality of Life in Metropolitan Washington, D.C.: Some Statistical Benchmarks, Washington, D.C.: The Urban Institute, 1970.
Leopold, Luna B., Quantitative Comparison of Some Aesthetic Factors Among Rivers, Washington, D.C.: U.S. Geological Survey, Circular #620,1969.
Marshall, Kaplan, Gans, and Kahn, Social Characteristics of Neighborhoods as Indicators of the Effects of Highway Improvements, Washington, D.C.: U.S. Department of Transportation, 1972.
Program Planning for Houston Multi-Service Centers, Houston, Rice Center for Community Design + Research, 1975.
State of the City, Priorities of Need, Los Angeles; City of Los Angeles Community Analysis Bureau, 1974.
Leopold, Luna B.; Clarke, Frank E.; Hanshaw, Bruce B.; and Balsley, James R.; A Procedure for Evaluating Environmental Impact, Washington, D.C.; U.S. Geological Survey. 1971.
Environmental Analysis for Development Planning: Chambers County, Texas; Volume I, An Approach to Natural Environmental Analysis, Houston, Texas; Rice Center for Community Design + Research, 1975.

4. Appleyard, Donald and Carp, Frances, "The BART Residential Impact Study: A Longitudinal Empirical Study of Environmental Impact," in Prieser, Wolfgang, F.E., Environmental Design Research, Vol. II, Stroudsberg, Pa.; Dowden Hutchinson and Ross, 1973, pp. 296-307.
Families in Public Housing: An Evaluation of Three Residential Environments in Rockford, Illinois, Urbana-Champaign, Illinois; University of Illinois Committee on Housing Research and Development, 1972.
Warren, Donald I., and Rachel B., "Six Kinds of Neighborhoods," Psychology Today, Vol. 9, No. 1, June, 1975, pp. 74-80.
Weiss, Robert S., and Rein, Martin, "The Evaluation of Broad-Aim Programs," in Caro, Francis, G., ed., Readings in Evaluation Research, New York: Russell Sage Foundation, 1971, pp. 287-296.

5. Hornback, et. al., op. cit., and Johes and Martin, op. cit., provided the most comprehensive existing frameworks.

6. For examples see, Haythorn, William W., "A 'Needs' by 'Sources of Satisfaction' Analysis of Environmental Habitability," Proceedings: First Symposium on Habitability, Volume II, 1970, pp. 1-31.
"American Public Health Association, Committee on Housing and Health, 'BASIC HEALTH PRINCIPLES OF HOUSING AND ITS ENVIRONMENT'," American Journal of Public Health, Vol. 59, No. 5, May 1969, pp. 841-853.
Maslow, A.H., "A Theory of Human Motivation," Psychological Reviews, 50, 1943, pp. 370-398.

7. Braybrooke, Susan, "Evaluating Evaluation," Design and Environment, Vol. 5, No. 3, Fall 1974, pp. 20-25.
"Finding Out About Evaluation", op.cit. pp. 32-35.

8. For illustrations, refer to: Chapin, F. Stuart, Jr., Human Activity Patterns in the City, New York: John Wiley & Sons, 1974.
Economic and Social Effects of Highways, Washington, D.C.: U.S. Department of Transportation, 1972.
Elderly Housing: The Impact of Quality in the Elderly Environment, New York: New York State Urban Development Corporation.
Fried, Marc, "Grieving for a Lost Home," in Gutman, Robert, ed., People and Buildings, New York: Basic Books, 1972.
Fried, Marc, and Gleicher, Peggy, "Sources of Residential Satisfaction in an Urban Slum", AIP Journal, Vol. 27, No. 4, April 1961.
Gans, Herbert, "The Impact of Residential Site Planning on Social Relations," in Gans, Herbert, People and Plans, New York: Basic Books, 1968.
Gans, Herbert J., People and Plans, New York: Basic Books, 1968.
Newman, Oscar, Defensible Space, New York: MacMillan and Company, 1972.
Proshansky, Harold M., Ittleson, William H., and Rivlin, Leanne G., ed., Environmental Psychology, New York: Holt, Rinehart and Winston, 1970.
Reiss, Charles, and Kwartler, Michael, "Housing Quality Program Puts Human

Scale into Residential Zoning," Planners Notebook, Vol. 4, No. 6, December 1974.
Suttles, Gerald D., The Social Construction of Communities, Chicago: The University of Chicago Press, 1972.
The Home in its Setting: An Approach to the Appraisal of Housing Schemes, London, England: The Greater London Council.
Van Der Ryn, Sim, Amenity Attributes of Residential Locations, San Francisco: San Francisco Community Renewal Program, 1963.

9. These were based largely on interviews and reports discussed later under data sources.

10. The State of the City, A Cluster Analysis of Los Angeles, Los Angeles: City of Los Angeles Community Analysis Bureau, 1974, and State of the City, Priorities of Need, Los Angeles: City of Los Angeles Community Analysis Bureau, 1974.

11. Louisville and Jefferson County Planning Commission, Urban Indicators Data.

12. LOUISVILLE
Metropolitan Transit Improvement Program for Louisville, Kentucky, Louisville, Kentucky: Schimpeler-Corradino Associates, 1974.
Rapid Mass Transit Study, Louisville Metropolitan Area, Chicago: DeLeuw, Cather and Company, 1969.
Environmental and Section (4f) Statement: Watterson Expressway, Louisville, Kentucky, 1973.
Vogt-Ivers and Associates, Transportation Report, Louisville, Ky.: Louisville Metropolitan Comprehensive Transportation and Development Program, 1969.
CHICAGO
Final Report: Chicago Central Area Transit Project, Chicago, Illinois: Chicago Urban Transportation District, 1974.
Before and After Impact Assessment Study: Chicago Central Area Transit Project, Chicago, Illinois: Chicago Urban Transportation District, 1974.
Environmental Impact Analysis: Chicago Central Area Transit Project, Chicago, Illinois: Chicago Urban Transportation District, 1974.
Annual Report 1973-1974, Chicago, Illinois: Chicago Urban Transportation District, 1974,1975.
LOS ANGELES
Kaiser Engineers/DMJM Joint Venture, Evaluation/Analysis by Sub-Area and Total System: Plan Refinement, Vol. 1 and 2, Los Angeles, Calif.: Southern California Rapid Transit District, 1974.
Kaiser Engineers/DMJM Joint Venture, Refinement of Transit System Plan, Los Angeles, Calif.: Southern California Rapid Transit District, 1974.
Southern California Rapid Transit District, Transit for Los Angeles County, Los Angeles, Calif.: Southern California Association of Governments, 1974.
Critical Decisions Plan for Regional Transportation, Los Angeles, Calif.: Southern California Association of Governments, 1974.
Sorenson, Sterling A., and Brewer, David W., The LARTS Transportation Model: Description and Assumptions, Los Angeles, Calif.: CALTRANS/LARTS, 1974.

13. For example, data from Water Quality Monitoring Agencies, Air Quality Monitoring Agencies, Parks and Wildlife Agencies, Public Health Agencies, and others. Data was available from the Louisville and Jefferson County Planning Commission, Urban Indicators Data, and was used in this report, while no data was collected from Chicago or Los Angeles.

14. Census data provided the bulk of information for Los Angeles and Chicago, re: 1960 & 1970 Census of Population and Housing Census Tracts, Chicago, Illinois and Los Angeles, California, Washington, D.C.: U.S. Bureau of the Census, 1963, 1972.

15. Refer to list of key contacts, section

16. LOS ANGELES
Southeast Los Angeles District Plan: Staff Report, Los Angeles: Department of City Planning, 1971.
Wilshire District Plan Study: Preliminary Plan Staff Report, Los Angeles: Department of City Planning, 1970.
Wilshire District Plan Study: Socio-Economic Analysis, Los Angeles: Department of City Planning, 1970.
CHICAGO
Comprehensive General Plan, Evanston, Illinois: Plan Commission, 1974.
LOUISVILLE
Louisville Fact File, Louisville, Ky.: Louisville Area Chamber of Commerce.
Center City Development Program, Louisville, Ky.: Center City Committee, 1969.
Report 2, Community Priorities and Evaluations, Louisville, Kentucky: Urban Studies Center, University of Louisville, March, 1975.
"Policies Planning - an Emerging Process", Interact, Louisville, Kentucky: Louisville and Jefferson County Planning Commission, June, 1975.

Part 5 Los Angeles Case Study

5a Introduction

An urban complex of 10.1 million population, Los Angeles is currently the largest metropolitan area in the nation without heavy transit either in place or under construction. It is not without plans; however, present efforts focusing on the final planning and opening of a 900 million dollar starter system have been preceeded by years of effort in alternative plan development culminating in the Southern California Regional Transit System Plan of 1974.[1] This includes public presentation and rejection by voters at the polls in 1974 of a proposed tax levy of one percent to support initial development of the massive integrated transit system including fixed guideway, express bus, feeder bus, and personalized rapid transit elements.

Current proposals for a fixed guideway starter line are consistent with the overall grid network of the 1974 plan and include deep bore tunnel/subway, freeway, and railway right-of-way alignments.[2] Although the stop application examples of this research may not represent the exact alignment of most recent plans[3], they provide highly relevant examples of similar situations along any of the many alternative routes presented during or since the 1974 tax levy rejection.

WHY LOS ANGELES?

Los Angeles was selected as one of the four cities in which opportunities and pitfalls for application of Value Capture WOULD BE CRITICALLY REVIEWED because it provided a wide range of potential stop development/ Value Capture opportunities related to transit development within the context of an economically dynamic urban area. While highly reminiscent of Houston in the previous research, Los Angeles is characterized by a number of development activity centers which are the focus of its transit proposal and as such pose excellent opportunites for Value Capture application.

Within the overall research, Los Angeles provided an excellent opportunity to observe potential Value Capture application in a State whose court and legal system is noted for its liberal and enlightened view of a number of issues fundamental to successful Value Capture application.

BASE ASSUMPTIONS

The Value Capture Policy Research in Los Angeles is faced with some constraints which should be noted before findings are presented.

For the purposes of the stop application investigations in Los Angeles, a limited transit system was assumed. Deliberations over specific corridors and alignments were based on currently available data.[4] The selected corridors reflect what could be considered as a starter system. The transit lines depicted on the map did provide a wide range of stop situations from which three were selected for intensive community design and financial investment investigation. Graham Avenue at 103rd Street in Watts, Exposition Boulevard and Figueroa at Exposition Park, and Wilshire Boulevard at Western Avenue represent, respectively, a low income redevelopment situation, a mixed-use, institutional location, and an area of high density mixed-use development. These situations were selected along with ones in Chicago and Louisville to provide a wide range of community environmental types for the overall research effort. For each selected stop situation, alternative Value Capture strategies were prepared, illustrating within a single stop context the efficacy of those Value Capture techniques applied. The results of this work is presented in the Community Design section for Los Angeles.

In preparation of the pro forma financial investment analyses presented herein, data from a wide range of sources was used. To maintain comparability between this work in each city, extensive efforts were made to use most recently available national data sources adjusted to each locality.[5] Certain data such as land value of course were not only city but stop location specific.[6]

OVERVIEW OF AGENCIES

Los Angeles like most cities has a copious number of public agencies involved in planning for the development of mass transit. The lead agency of these is the Southern California Rapid Transit District (SCRTD).

TRANSIT SYSTEM ROUTE MAP - Depicting extent of total system considered for study

Fig. 5/1

Organized in 1964, the District operates the present bus system in Los Angeles as well as possessing responsibility for the preparation of a 240 mile long range master plan for rapid transit corridors completed by July of 1974.[7] This plan, however, was rejected by the voters in November, 1974. Recent activity in starter line development has occurred in late summer of 1975. This will provide new and urgent responsibilities to SCRTD.

The overall regional plan of 1974 was adopted by the Southern California Association of Governments (SCAG) for the Los Angeles region.[8] SCAG and its Los Angeles Regional Transportation Study (LARTS) provide the multi-jurisdictional transportation planning and coordinating body for the Los Angeles area and in such capacity will be strongly involved in future regional mass transit development. Member jurisdictions in SCAG, of course, include the City of Los Angeles and Los Angeles County. As witnessed by recent debate[9] over starter line location alternatives, both of these entities will provide significant influence in mass transit development in the region in the coming months.

Based on interviews with local sources from each of the aforementioned jurisdictions and private sector as well, these research findings are reflective of current legal, financial, planning, and administrative thinking in the Los Angeles area. The following individuals were interviewed as part of this project and are generally referenced as experts within the text which follows.

City of Los Angeles:
Hon. Thomas Bradley, Mayor
Mr. Norman Emerson, Executive Assistant to the Mayor
Mr. Bob Ingram, City Administrative Officer
Mr. John Rakow, Legislative Analyst
Mr. Norman L. Roberts, Deputy City Attorney
Mr. Robert Russell, Chief Engineer
Mr. Donald R. Howery, Division Engineer
Mr. Louis Clearwater, Senior Traffic Engineer
Mr. Tom Stemnock, Senior City Planner
Mr. Richard Gervais, Planning Assistant
Mr. William Schoenfeld, Deputy General Manager, Dept. of Airports

Community Redevelopment Agency:
Mr. Irwin Rowe, Program Manager
Mr. Lewis Moore, Comptroller
Mr. David A. Wilcox, Deputy Administrator for Project Operations

Southern California Rapid Transportation District:
Mr. Brian Pearson, Senior Engineer
Mr. Jeffery P. Carpenter, Assistant Transportation Planner
Mr. Dick Powers, Legal Counsel
Ms. Suzanne Gifford, Assistant Legal Counsel
Mr. Joe Scatch, Comptroller
Mr. William Foster, Principal Legislative Analyst (State)
Mr. Ralph Dela Cruz, Principal Legislative Analyst (Federal)
Mr. Omar Hinkle, Federal Grants Coordinator
Mr. Samuel Olivito, Principal Analyst for City and County Affairs

Southern California Association of Governments:
Mr. Ray Remy, Executive Director
Mr. Tad Widby, Assistant Director of Transportation Planning
Mr. Gerald B. Leonard, Senior Transportation Planner
Mr. R. David MacDonald, Transportation Planner
Mr. Richard Spicer, Senior Planner
Mr. David Fine, Legal Consultant

Los Angeles County:
Mr. Jonathan C. Beaty, Deputy Supervisor
Mr. Richard Y. Karasawa, Road Department
Mr. Donald Royce

Pasadena Redevelopment Agency:
Mr. Gerald Trimble, Executive Director
Mr. David A. Ralston, Deputy Executive Director
Mr. Thomas Perkins, Legal Counsel

California Department of Transportation:
Mr. H.L. Parrish, Department of Mass Transit
Mr. Pearson L. Pedley, Supervisor, Air Space Department
Mr. Haynes

BART, San Francisco:
Mr. Leonard V. Sullivan, Staff Attorney
Mr. William F. Goelz, Director of Finance
Mr. Charles Wenan

Others:
Mr. Eugene B. Jacobs, Attorney-at-Law
Mr. Murray Kane, Attorney
Mr. Donald Hodgemen, Attorney, O'Melveny and Meyers Attorneys-at-Law
Mr. George Lefcoe, Attorney
Mr. William C. Honsaker, Ralph G. Sutro & Co.
Mr. James D. Noel, Regional Economic Analyst, United California Bank
Professor Donald Hagman, UCLA Law School
Professor Peter Marcuse, Department of Urban Studies, UCLA
Mr. Ronald Beals
Senator James R. Mills, State Capitol, Sacramento, California
Mr. Samuel A. Sperry, Attorney, Schreiner and Sperry
Mr. Tallet, Rogers, Vizard, and Tallett
Mr. Thomas F. Vizard, Rogers, Vizard and Tallett

5b Legal Findings

INTRODUCTION

The implementation of Value Capture Policy in the Los Angeles area is at once the most promising and complicated of the case studies in this research. In a sense, it is a study of ironies. One of the only states in the country with a statute specifically authorizing special benefit assessment for transit districts--the statute has never been used. Possessed of a broad statutory definition of public purpose--a key to supplemental condemnation--the community appears to be timid in using it. Air and subsurface rights development appears very promising. However, tax increment financing and urban renewal projects--downtown L.A., if you can define it, has just been declared a development district en toto--may make other techniques pall by comparison, even though it is technically not a Value Capture technique. Finally, the state of California has long been blessed with some of the most forward-looking and intellectually-competent courts in the United States, which may bode well for new techniques when and if they are challenged. As with other jurisdictions, most of these techniques involve some public borrowing, which means the lender must be satisfied his evidence of indebtedness is secure. This in turn should virtually guarantee litigation--even if only of the friendly variety--over techniques with which the financial community--and their legal advisors--may not be particularly comfortable. In a surprising number of instances, this simply has not been the case.

SUPPLEMENTAL CONDEMNATION

Public Purpose and Public Use

As the power of eminent domain must generally be exercised for a public purpose, the breadth of its definition can be especially critical to the use of supplemental condemnation as a means for implementing Value Capture Policy. Article I, Section 14 of the California Constitution and Code of Civil Procedure Section 1237 require condemnation to be for a "public use". Apparently this is due in no small part to the so-called "redevelopment" cases in California. These cases brought largely to challenge the liberal grant of authority to exercise the power of eminent domain under various renewal and redevelopment statutes, resulted in a more or less uniform upholding of such powers.[10] The question of public necessity for the exercise of the power of eminent domain is apparently not even justifiable in California, even if fraud, bad faith and absence of discretion are alleged by a property owner.[11]

In any event, after receiving a guardedly optimistic opinion form the City Attorney's Office,[12] the City of Los Angeles proceeded to acquire land in the Hollywood area for the purpose of leasing it to private individuals for a motion picture-television center-land, a common public use. In County of Los Angeles v. Anthony,[13] the California Appellate Court has upheld a similar venture by the city in condemning land to be leased to private persons for a motion picture and television museum. The case was upheld largely on the strength of language from the redevelopment cases.[14] Interestingly enough, the land is still

vacant 10 years later, and is apparently being used as a parking area for the Hollywood Bank.

Such a broad view of "public purpose", while hardly a ceding of its jurisdiction over the question to the legislature, aids the use of supplemental condemnation to effect Value Capture.

However, the California legislature has just passed, and the Governor just signed, an extensive piece of legislation to take effect July 1, 1976, which deals substantially with public purpose and eminent domain.[15] It extends the requirement for a resolution of public necessity to all public agencies before exercising the power to condemn,[16] and adds significantly to the requirements for future and remnant condemnations, discussed below.

Supplemental Condemnation Essential to the Success of an Entity

While most of the experts interviewed agreed that some form of supplemental condemnation would, under proper circumstances, be legal, most had trouble with the "economic protection" (as it is known in California) theory. One eminent counsel of considerable experience in the area suggested that the problem of such production of revenue marginally related to the entity's public purpose would be more easily accomplished if it took place on property already owned or acquired expressly for such a related public purpose.[17] The City Attorney's Office is dubious about such supplemental condemnation without express statutory authorization, but is guardedly optimistic considering the increasingly expanding concept of public use in California, should such a statute be enacted.

On the other hand, there certainly seems to be little difficulty encountered in using land otherwise validly acquired, for a range of wholly-private uses. Witness the city's leasing of 125,000 square feet of retail space in its $42,000,000 Los Angeles Mall complex, "owned and leased by the City of Los Angeles", located atop one of its parking lots!

But when it comes to supplemental condemnation for economic protection it appears California may not be ready, and one expert indicated that the Willacy County and Courtesy Sandwich cases[18] from Texas and New York may be ahead of the mainstream in California.

In essence, it probably boils down to the degree to which one can stretch the purpose of the exercise of eminent domain. There appears to be general agreement that one could condemn land around a transit stop for such as parking, for example.[19] This is clearly permissible under the statutory powers granted the Southern California Rapid Transit District, as well as the City of Los Angeles. The question is whether the "necessary and convenient language below would, given the expanding public purpose" doctrine discussed above, permit more:[20]

> *The district may acquire, construct, own, operate, control or use rights-of-way, rail lines, monorails, bus lines, stations, platforms, switches, yards, terminals, parking lots, and any and all other facilities necessary or convenient for rapid transit service within or partly without the district, underground, upon, or above the ground and under, upon, or over public ways or waterways, together with all physical structures necessary or convenient for the access of persons and vehicles thereto, and may acquire or contract for any interest in or rights to the use or joint use of any or all of the foregoing;...*

Another legal expert indicated that such condemnation around a stop would in most cases be permissible under a "protection" theory. Indeed, the new eminent domain statute noted above specifically authorized such "protective acquisitions" generally:[21]

> *"(a) Subject to any other statute relating to the acquisition of property, any person authorized to acquire property for a particular use by eminent domain may exercise the power of eminent domain to acquire property necessary to carry out and make effective the principal purpose involved including but not limited to property to be used for the protection or preservation of the attractiveness, safety, and usefulness of the project.*
>
> *"(b) Subject to any applicable procedures governing the disposition of property, a person may acquire property under subdivision (a) with the intent to sell, lease, exchange, or otherwise dispose of the property, or an interest therein, subject to such reservations or restrictions as are necessary to protect or preserve*

the attractiveness, safety, and usefulness of the project."

According to the Los Angeles City Attorney's Office, public agencies are now in a more favorable position regarding protective acquisitions than they were prior to the repeal of Article 1, Section 14 1/2 of the California Constitution in 1974. Unlike this Section 14-1/2, the new Eminent Domain Law apparently does not contain any distance limitations for protective acquisitions. Otherwise, the new law is apparently a codification of existing California case law which permits "taking incidental property to carry out and make effective the principal uses involved".[22] Such authority is specifically spelled out for another agency, the California Department of Transportation:[23]

> *The department may condemn real property or an interest therin for reservations in and about and along and leading to any State highway or other public work or improvement constructed or to be constructed by the department and may, after the establishment, laying out and completion of such improvement, convey out any such real property or interest therein thus acquired and not necessary of such improvement with reservations concerning the future use and occupation of such real property or interest therein, so as to protect such public work and improvement and its environs and to preserve the view, appearance, light, air and usefulness of such public work; provided, that land so condemned under authority of this section shall be limited to parcels lying wholly or in part within a distance of not to exceed one hundred fifty feet from the closest boundary of such public work or improvement; provided that when parcels which lie only partially within such limit of one hundred fifty feet are taken, only such portions may be condemned which do not exceed two hundred feet from said closest boundary.*

A more optimistic view was voiced by those members of the legal community whose practice lies in the field of development agencies and development law. There has been considerable experience in California with redevelopment agencies, which have generally been given extremely broad powers of condemnation if:

1) proceeding according to a specific plan

2) in areas declared to be blighted, or at least in need of redevelopment in the so-called blighted area, a good deal of non-blighted land can also be condemned. This has never technically been considered "excess" condemnation, however. The redevelopment authority also has broad authority to dispose of the land so acquired, by sale or lease, to private parties.

Supplemental Condemnation for Future Use

It does not appear that condemnation for a declared future use will raise many problems in Los Angeles. California Law specifically provides for such condemnation provided the property in question is going to be used within 5 to 7 years.[24] There is apparently no restriction on the use of the property, once so validly acquired, and a suit filed by a landowner to get back land so acquired which was not eventually used for that purpose--a mental hospital--lost. Such condemnation is apparently already standard procedure for redevelopment agencies, in that the plans under which they operate contemplate redevelopment over a period of several years. This is generally set out in the statutory authorization under which the agency operates. It would also appear that officials responsible for the operation of the SCRTD would expect to be able to condemn land for future use--though the District has apparently not yet condemned <u>any</u> land for such purposes.

Finally, the State Highway Department, CALTRANS, is <u>specifically</u> empowered to both condemn land for future needs <u>and</u> to <u>lease</u> such lands until such time as they are needed:[25]

> *The authority conferred by this code to acquire real property for state highway purposes includes authority to acquire for future needs.*
>
> * * *
>
> *The department is authorized to lease any lands which are held for state highway purposes and are not presently needed therefore on such terms and conditions as the director may fix and to maintain and care for such property in order to secure rent therefrom.*

Remnant and Supplemental Condemnation

California has what is probably the least restrictive case law on the subject of remnant acquisition by eminent domain. The California Streets and Highways Code provides: (§ 104.1)

> *Whenever a part of a parcel of land is to be taken for state highway purposes and the remainder is to be left in such shape or condition as to be of little value to its owner, or to give rise to claims or litigation concerning severance or other damage, the Department may acquire the whole parcel and may sell the remainder or may exchange the same for other property needed for state highway purposes.*

This statute was construed and upheld in People v. The Superior Court of Merced County[26] in which the Supreme Court of California held that even a "remnant" as large as 54 acres could be condemned under the remnant theory of excess condemnation when it could probably be condemned for a little more than the cost of taking the one-half acre needed for highway purposes, and paying damages for the remainder which would thus become land-locked:[27]

> *Although a parcel of 54 land-locked acres is not a physical remnant: its value as a land-locked parcel is such that severance damages might equal its value. Remnant takings have long been considered proper.*

The Highway Department is restricted in the manner in which it may use such "remnant" land so acquired, however:[28]

> *Whenever land has been acquired pursuant to Section 104.1, the department may, in its discretion, lease to a local agency for park purposes such portion of the remainder not to exceed 200 feet from the closest boundary of the state highway or public work or improvement, when such use will protect such highway, public work or improvement and its environs, and will preserve its view, appearance, light, air and usefulness. Such lease shall be made in accordance with procedures, terms and conditions to be prescribed by the California Highway Commission. Such terms and conditions shall include all of the following:*
>
> *(a) Provisions requiring the local agency to develop and maintain such portion of the remainder as a park.*
>
> *(b) Provision that whenever such portion of the remainder is needed for state highway purposes, the lease shall terminate.*
>
> *(c) Provision that whenever such portion of the remainder ceases to be used for park purposes, the lease shall terminate.*

As indicated above, there is probably very little in the way of restriction on a public agency like a transit district in dealing with land once validly acquired.

Until recently the one caveat appeared in San Francisco v. Ross [29] in which the Supreme Court of California held it was illegal to condemn land for public parking unless a public entity, which had turned the facility over to a private entity, retained control over rates.

But the new California legislation on eminent domain purports to overrule the Merced County case with respect to condemnation for remnants and to generally restrict "excess" takings by eminent domain. It specifically prohibits acquisition if the party whose property is to be condemned can show that the public entity has a reasonable, practical and economically sound means to prevent the property from becoming a remnant.[30] Further, the Los Angeles City Attorney's Office has taken the position that remnants must be of little market value to be so acquired.

Mention has already been made of some of the powers of CALTRANS. More will be said in a discussion of air rights below. Suffice it to say that the statutory powers for acquisition of property, by condemnation or otherwise, are extremely broad and though few have been interpreted by the courts, are similarly broadly construed by CALTRANS:

> *The department may acquire, either in fee or in any lesser estate or interest, any real property which it considers necessary for state highway purposes. Real property for such purposes includes, but is not limited to, real property considered necessary for any of the following purposes:*
>
> *(a) For rights-of-way, including those necessary for state highways within cities.*
>
> *(b) For the purposes of exchanging the same for other real property to be used for rights-of-way.*
>
> *(c) For rock quarries, gravel pits,*

or sand or earth borrow pits.

(d) For offices, shops, or storage yards.

(e) For parks adjoining or near any state highway.

(f) For the culture and support of trees which benefit any state highway by aiding in the maintenance and preservation of the roadbed, or which aid in the maintenance of the attractiveness of the scenic beauties of such highway.

(g) For drainage in connection with any state highway.

(h) For the maintenance of an unobstructed view of any portion of a state highway so as to promote the safety of the traveling public.

(i) For the construction and maintenance of stock rails.

(j) For the construction and maintenance of bicycle lanes and paths.[31]

TAXES AND SPECIAL BENEFIT ASSESSMENT

The most fruitful way of recapturing value in California may well be by means of monetary transfer. California is the only state we have been able to find with a special benefit assessment statute geared to the theoretical needs of rapid transit. However, it has never been utilized. California is also one of the leaders in authority and implementation for tax increment financing, which really rearranges the flow of tax benefits from a project and encourages funding by a separate entity head on the pledging of those tax revenues that might normally go to the general-purpose local government in which a particular project is located.

Special Benefit Assessment

The state of California is a pioneer in this area, its legislature having promulgated comprehensive local transportation statutes with a substantial "special benefit assessment" feature as early as 1968. The pertinent provisions are:[32]

The legislative body of any city or the board of supervisors of any city and county may establish one or more special benefit districts within the city and county pursuant to this chapter.

Any special benefit district may contain separate zones, which may consist of either contiguous or noncontiguous areas of land within the city or city and county. Each zone within a special benefit district shall be an area adjacent to a station of the municipal transportation system or along the route or lines of such system which the legislative body or board of supervisors determines will receive special benefit by reason of the operation of transportation facilities but all zones within a special benefit district need not be adjacent to the same station or adjacent to the same portion of the route or lines.

The California special benefit district legislation performs several important functions. First, it represents a declaration by the legislature that special benefits may accrue to property along a mass transit line. Although a property owner may claim that his land receives no special benefit, the courts give great weight to this legislative determination and probably erroneous. Thus, once the powers herein are granted to the local transit district and that district lays out the special benefit districts, the burden to show that certain land is not specially benefitted is placed upon the landowner.

Second, the legislation specifically allows for the creation of several special benefit districts within one transit district (around each transit station). Moreover, each special benefit district itself may contain separate zones. These provisions give the transit district considerable flexibility in apportioning costs in direct proportion to benefits. Instead of assessing only property adjacent to the transit station (as in the typical street assessment), the district may set up zones with assessments decreasing in proportion to the distance from the transit stop.

The problem is that this piece of legislation has never been used. This is especailly puzzling at first when one considers that the most recent and modern of rapid transit systems, the Bay Area Rapid Transit System, during the 1960's. Of course, much of BART's acquisition program was completed by the time the so-called Mills Bill became law. But it appears unlikely that it would have been utilized in any event. On advice of counsel, BART officials were apparently particularly concerned with the effect of protracted hearings and litigation over such a new financing upon its programs. Moreover, there was concern that the risk of failure to obtain the necessary two-thirds vote for Mills Act bonding would be foolish. Finally, the method of establishing the criteria for ascertaining incremental value were thought to be too difficult, often resulting in ar-

bitrary decisions. It was also thought that sufficient benefit would accrue to BART through its district taxing mechanism values in Marin County caused by the development of BART.

According to the sponsor of the original legislation, Senator James Mills, the use of special benefit assessments for BART is extremely unlikely. First, most extensions would go in the taxing district from which money to finance BART has already been collected. Property owners there are not likely to vote themselves additional taxes. Second, for similar reasons, those presently benefiting by proximity to the line are without incentive altogether to vote themselves additional taxes. While it would be possible to use special benefit assessment for a new system, such as in Los Angeles, Mills is not aware of any entity in California interested in using it.[33]

Aside from the aforementioned difficulties involved in drawing up the districts and assessing the actual benefits derived are part of the problem, it has also been suggested that such a scheme would be resisted by the business community whose property would be subjected to the assessment, on the ground that the benefit is so general that the entire county really ought to pay. It was also suggested that the series of defaults during the depression on special assessment bonds in connection with assessments levied along Wilshire Boulevard has had a "chilling effect" on such special assessments which are out of the ordinary. One expert indicated, however, that he would have no hesitation in writing an opinion letter with respect to such bonds, assuming procedural matters were all in order.

It is worth noting that the statute authorizing the creation of the District may not be within the grant of power to a Transit District Board.[34] Preference of a number of experts seemed to be for other methods of financing or accomphishing value recapture--especially for tax increment financing, to which we now turn.

Tax Increment Financing

Basically, tax increment financing is a method by which one municipal agency or corporation pledges all or a portion of the incremental tax revenue caused by a public improvement or development paid by a second agency, to that agency in order to pay it back. The pledge is generally the quid pro quo demanded by the second agency before it will undertake the development as well as a device for financing the project generally. It is a reallocation of the value added among governmental agencies permitting a portion of increment to be segregated for specific purposes rather than placed in a general fund for municipal purposes generally.

In California, it works this way.[35] Unlike an assessment district, a tax allocation district does not impose an additional tax obligation upon an area. Rather, it allocates any increment of property tax revenues above a set amount to a community renewal or development agency. This agency and the tax allocation districts ("project areas") are established by a city council or a county board according to state law. The use of municipal revenues (accompanied by the power of eminent domain) in general and that increment from a tax allocation district for development or redevelopment purposes in particular has been traditionally limited by state legislation to alleviating of blight and deterioration. The accepted notion that the increased tax revenues that might result from a public agency's actions to improve and protect the public environment should be returned to that agency would appear analogous to the objective of returning property tax revenues generated by rapid transit to a transit agency.

Since the use of tax allocation district has been limited to situations where drastic counteractive remedial action is required, legislative clarification might be warranted. Although the California Community Redevelopment Law is uncommonly broad in its definition of "blighted areas ..."

> *...including areas which are in disuse as a result of "faulty planning"; areas where the property values are "depreciated" and there are "inadequate tax receipts"; where land is in "unproductive condition"; and where there is a "loss of population"...*

there does not appear to be a clear mandate in the law for tax allocation districting to support concurring preventive action by a responsible public agency.

It should be emphasized that a tax allocation district does not assess new development potentials. It only diverts the increment of tax revenue generated by new development away from the municipal treasury to a special community agency which, in turn, uses this revenue to pay off debts it has incurred in the process of bringing about community improvements. The developer makes no special fi-

nancial contribution for the benefit of being in the district.

The possibility for using this device for transit systems is good. As pointed out by one of Los Angeles' leading tax and development agency lawyers (who is also a former Attorney General for the State of California):[36]

> *The basic idea is value increment financing and the need to capture that increase in some form. For instance, you build a transit system--every station creates fantastic value increment around it and private people who own those properties benefit without cost. Public entities receive taxes, but that money does not have to go toward transportation. I would think any kind of enlightened transportation agency in the future would make sure that, in one way or another, the value increment will work its way back to help pay for the transportation system rather than being used by other entities not connected with it. (Emphasis added)*

On the other hand, the Los Angeles City Attorney's Office has indicated that to use tax increments for the financing of transit improvements might require amendments to the pertinent enabling legislation on the California constitution.

The law has already been implemented in California and several projects have been completed under its auspices.[37]

Of course, this method of re-allocating incremental value already subject to tax causes some delay in benefit to cities who have so pledged them to, say, local development authorities. Apparently this has caused some consternation in some of the California cities in which it has been applied. This is especially true in Los Angeles, where a lawsuit has recently been filed challenging its use. Finally, it is not altogether clear that a transit authority has such powers yet.

The Constitution of the State of California was amended specifically to permit local development authorities to engage in tax increment financing:[38]

> *All property in a redevelopment project established under the Community Redevelopment Law Act, as now existing or hereafter amended, except publicly owned property not subject to taxation by reason of such ownership, shall be taxed in proportion to its value as provided in Section 1 of this article, such taxes (the word "taxes" as used herein shall include, but shall not be limited to, all levies on an ad valorem basis upon land or real property) shall be levied and collected as other taxes are levied and collected by the respective taxing agencies.*
>
> *The Legislature may provide that any redevelopment plan may contain a provision that the taxes, if any, so levied upon such taxable property in a redevelopment project each year by or for the benefit of the State of California, any city, county, city and county, district, or other public corporation (hereinafter sometimes called "taxing agencies") after the effective date of the ordinance approving the redevelopment plan, shall be divided as follows:*
>
> *(a) that portion of the taxes which would be produced by the rate upon which the tax is levied each year by or for each of said taxing agencies upon the total sum of the assessed value of the taxable property in the redevelopment project as shown upon the assessment role used in connection with the taxation of such property by such taxing agency, last equalized prior to the effective date of such ordinance, shall be allocated to, and when collected shall be paid into, the funds of the respective taxing agencies as taxes by or for said taxing agencies on all other property are paid (for the purpose of allocating taxes levied by or for any taxing agency or agencies which did not include the territory in a redevelopment project on the effective date of such ordinance but to which such territory has been annexed or otherwise included after such effective date, the assessment roll of the county last equalized on the effective date of said ordinance shall be used in determining the assessed valuation of the taxable property in the project on said effective date); and*
>
> *(b) that portion of said levied taxes each year in excess of such amount shall be allocated to and when collected shall be paid into a special*

fund of the redevelopment agency to pay the principal of and interest in loans, moneys advanced to or indebtedness (whether funded, refunded, assumed or otherwise) incurred by such redevelopment development agency to finance or refinance, in whole or in part, such redevelopment project. Unless and until the total assessed value of the taxable property in a redevelopment project exceeds the total assessed value of the taxable property in such project as shown by the last equalized assessment roll referred to in paragraph designated (a) hereof, all of the taxes levied and collected upon the taxable property in such redevelopment project shall be paid into the funds of the respective taxing agencies. When said loans, advances, and indebtedness, if any, and interest thereon, have been paid, then all moneys thereafter received from taxes upon the taxable property in such redevelopment project shall be paid into the funds of the respective taxing agencies as taxes on all other property are paid.

The Legislature may also provide that in any redevelopment plan or in the proceedings for the advance of moneys, or making of loans, or the incurring of any indebtedness (whether funded, refunded, assumed or otherwise) by the redevelopment agency to finance or refinance, in whole or in part, the redevelopment project, the portion of taxes mentioned in paragraph designated (b) hereof may be irrevocably pledged for the payment of the principal of and interest on said loans, advances, or indebtedness.

It is intended by this section to empower any redevelopment agency, city, county, or city and county under any law authorized by this section to exercise the provisions hereof separately or in combination with powers granted by the same or any other law relative to redevelopment agencies. This section shall not affect any other law or laws relating to the same or a similar subject but is intended to authorize an alternative method of procedure governing the subject to which it refers.

Appropriate statutes implement this provision.[39]

But the constitution limits authority to engage in tax increment financing to redevelopment agencies. While there is some support in California for the proposition that:

1) The power to permit tax increment financing is and always was vested in the legislature regardless of the constitutional amendment,

2) So the amendment is superflous,

3) Therefore a simple amendment to the pertinent legislation will serve to permit transit districts also to engage in--not only benefit from--tax increment financing,

it is also true that the view is not universally held.

In any event, it is clear that tax increment financing has been used to launch and construct many substantial projects in the State of California. During the first 20 years of experience in California $170,000,000 worth of tax allocation bonds have been issued by 26 different redevelopment agencies.[40] If the matter of legal authority could be solved, it could serve as a useful financing --though not strictly Value Capture--technique.

AIR RIGHTS/SUBSURFACE RIGHTS DEVELOPMENT

This particular aspect of Value Capture Policy implementation appears to raise the fewest problems in Los Angeles.[41] Mention has already been made of the extensive development on and over city policy in connection with the Los Angeles Mall Shopping Center.

Apparently, the Transit District has been advised it can also deal in air rights, even participating in the development itself so long as some relation to the transit customer's convenience is maintained:[42]

> *Section 30631 authorizes the District to acquire or construct all facilities necessary or convenient for rapid transit service together with such structures necessary or convenient for access of persons thereto.*

In our opinion these broad powers would include the development of commercially oriented facilities designed for customer convenience as well as additional revenues.

In and about bus stations or fixed guideway stations the potential uses for surplus land and air rights would involve such commercial development as service stations and allied development, retail commercial uses and commercial parking.

* * *

Insofar as locating interested business is concerned, prospective users of property available for sale or lease are normally sought through publicity and advertising or through the use of brokers. Regardless of the means selected, the District, as a public agency, would take steps to assure...

* * *

In conclusion, the District possesses the legal authority to use its stations, adjacent land and system air rights for commercial development. In order to evaluate fully the most desirable method of proceeding in such a venture, (i.e., sale, short/long term lease, etc.) and to assure a good working relationship with local governments, adequate lead time is essential. To this end, a comprehensive study of design and marketing considerations would undoubtedly be the first step toward developing a Board policy on customer services in the District.

Other experts were not so sanguine, suggesting it would be safer if specific statutory authority were set forth in an agency's enabling legislation.

For sheer power to undertake such development, nothing can beat CALTRANS and its authority to utilize so-called "surface" rights over and beneath highways in its right-of-way. The statutory authority (though never tested in court) is very broad:[43]

The department may lease to public agencies or private entities for any term not to exceed 99 years the use of areas above or below state highways, subject to such reservations, restrictions and conditions as it deems necessary to assure adequate protection to the safety and the adequacy of highway facilities and to abutting or adjacent land uses. Authorized emergency vehicles as defined in Section 165 of the Vehicle Code which are on active duty and are not merely being stored shall be given preference in the use of such areas, and no payment of consideration shall be required for this use of the areas by such vehicles. Prior to entering into such lease, the department shall determine that the proposed use is not in conflict with the zoning regulations of the local government concerned. Such leases shall be made in accordance with procedures to be prescribed by the California Highway Commission, except that in the case of leases with private entities such leases shall only be made after competitive bidding unless the commission finds by unanimous vote that in certain cases competitive bidding would not be in the best interests of the state. The possibilities of entering into such leases and the consequent benefits to be derived therefrom may be considered by the department in designing and constructing such highways. Revenue from such leases shall be deposited in the State Highway Fund.

On the strength of its statutory authority, CALTRANS has issued a series of implementing regulations:[44]

10.001 *Mission*

The mission of the Airspace Development unit is to implement a positive program of airspace development and nonoperating right of way. Such a program must be sensitive to local community needs and should insure the achievement of the following major goals:

1) to integrate highways into the community in a manner which is compatible with local planning goals and objectives through multiple use of highway rights of way.

2) to increase the local tax base through development of airspace to its highest and best use.

3) to reduce the amount of private

property utilized for highway support facilities and other public uses.

4) to enhance and protect the transportation corridor and its environs.

5) to increase the return on the taxpayer's investment through rental revenue.

10.002 Airspace Defined

Airspace is any property within the highway right of way limits which is capable of other uses without undue interference with the operation and possible future expansion of the transportation corridor for highway or other transportation uses.

It may consist of surface rights under a viaduct structure, the space above the traveled lanes, space within a loop of an interchange, or space between the main lanes and on or off ramps, of area in cut of fill slopes.
Airspace may also include excess parcels when the combination of excess land and airspace will result in substantially better land utilization than could be attained if developed separately.

10.003 Responsibilities of the Airspace Development Section

1) development of a positive program for maximum utilization of highway airspace consistent with the planning objectives and goals of the local communities.

2) administration of all freeway lease areas and airspace.

3) identification of potential airspace sites and maintenance of the Airspace Site Inventory.

4) implementation of the Marler-Johnson Highway Park Act, Section 14012 of the Government Code.

5) implementation of Section 104.15 of the Streets and Highways Code dealing with the use of excess land for park and recreational purposes.

6) liaison with the Community and Environmental Factors Unit in identifying the multiple-use concepts developed in the planning and design process.

7) implementation of multiple-use concepts developed in the planning and design process.

8) coordination with the District Maintenance and Landscape Departments in locating highway maintenance facilities on airspace.

9) cooperation with State, federal and local agencies in location of governmental facilities on highway airspace.

10) cooperation with private industry in development of improvements on sites suitable for such use.

10.004 The Use of Airspace for Building Improvements

It is the responsibility of the Airspace Development Unit to encourage the construction of building improvements on highway airspace when it has been determined that:

1) construction of improvements will not conflict with necessary future expansion of the highway facility for highway or other transportation models,

2) the proposed use will tend to integrate the freeway into the community and is acceptable to the local community as being consistent with local planning or zoning ordinances,

3) the proposed use will result in an increase in the local tax base, or result in other substantial community benefits,

4) the proposed use is economically sound and a fair market rent can be obtained,

5) the proposed use is aesthetically and functionally compatible with the highway corridor and its environs. (Emphasis added)

Acting under this broad authority CALTRANS has leased space under the Santa Monica Freeway for a 248-unit warehouse and a Culver City for commercial shopping center parking. In Sacramento, the Sacramento Transit District leases space under the freeway to store its buses, and under U.S. 80 is a commercial parking lot for recreational vehicles. Over the Capitol Street Bridge in Sacramento there are plans for a restaurant over the

Sacramento River. There are plans in Los Angeles to lease space under other freeways for industrial buildings and auto dealerships, using the underside of the freeway for roofing. Such programs currently produce between $6 and $8 million dollars per year for CALTRANS.

It is also worth noting that there is specific statutory provision for use of highway rights-of-way not only for parking facilities but also for mass transit:[45]

146. Any public agency having responsibility for the planning and development within a region of this state of public transportation systems may, with the approval of the commission, use the airspace over or under any existing state freeway in that region, or any portion other than the travel roadway of the right-of-way of such freeway, as a route for a public transportation system, such as a railway, monorail, tracked air cushion vehicle system or other such system which, in the discretion of the agency and the department, is feasible from an engineering standpoint, in conformity with established safety design standards, and is consistent with good ecological and environmental planning. The development and construction of such facilities shall be financed out of any available federal, state, and local funds.

146.5 The department may construct fringe and transportation corridor parking facilities along the state highway system when such construction is financed, in whole or in part, with federal funds and the entire balance of the cost of such construction is financed with funds contributed by the local agency or transit district. For the purposes of this code, such facilities shall be considered as part of the state highway and the department shall acquire the right-of-way necessary for such facilities in accordance with all of the laws and procedures applicable to other state highway projects, including, but not limited to, the provisions of Section 104 and 104.3, inclusive.

The rights and obligations of the department and the local agency or transit district with respect to such fringe and transportation corridor parking facilities shall be determined by agreement between the department and the local agency or transit district.

147. The department is authorized and empowered to provide for, finance and construct such mass transportation facilities as are required for loading and unloading of passengers carried on motor coaches or buses operated by common carriers of passengers for hire.

150. When the department, in cooperation with rapid transit districts as provided under Section 75.8 and as a part of its planning coordination with local agencies under Article 6 (commencing with Section 210) of this chapter recommends that mass public transportation facilities should be located along proposed freeway corridor in order to establish a planned balanced transportation system, the commission shall consider such recommendation in making its decision as to the location of the freeway.

If the commission determines that the location of mass public transportation facilities should be located along the proposed freeway corridor, it may also direct the department to plan, design, and construct the freeway so as to provide locations for such facilities, and the cost thereof shall be considered as part of the cost of constructing the state highway. In making such determination, the commission shall consider the extent to which the mass public transportation facilities will reduce the volume of traffic on the proposed freeway and the impact such joint development will have on community values, such as those referred to in Section 75.7. The commission shall also consider whether the rapid trnasit district has adopted a general plan for the development of its mass public transportation facilities and the likelihood as to whether sufficient funds will be available for the development of mass public transportation service in such locations along federal-aid highways only in those instances where it has received assurances of full federal financial participation in the cost of providing such locations.

If mass public transportation facilities other than roadways and other facilities for use of buses are to be constructed and placed in use in such locations, the department may enter into agreements for the sale of the locations to mass transit districts for use at a price equal to the market

value of such property at the time of sale. If mass public transportation facilities are not placed in use in the locations provided within five years of completion of the freeway, the department may develop such locations for freeway purposes, or it may lease or otherwise dispose of the locations in accordance with the provisions of this code.

The department may, in cooperation with rapid transit districts, develop exclusive or preferential bus lanes in such locations in accordance with the provisions of Section 149.

BART

Mention has already been made of CALTRANS authority to aid in the development of mass transit through airspace leases and the like, and more will be said in the following sections on joint development. What is particularly pertinent here is the growing, though incipient, attempt by BART to add to its revenues by means of leasing space in its publicly-acquired (often under threat of condemnation if not condemnation itself) land.

While extensive air rights development for private parties has not yet taken place, BART has received a recommendation by one of its consultants that it develop around its Lake Merit stop an office building to be occupied in part by BART and in part by other public agencies or private interests. (BART owns 3 blocks around this particular stop, all of which has its headquarters.)

BART's acquisition program has involved the taking of both easements (in high-value areas) and whole fees. While in some cases it has taken more than strictly needed for a specific alignment, the more usual situation is a discovery that too little has been taken for landscaping, better access, and future uses. BARTS' compensation procedures are such that it has paid "top dollar" for the real estate interests it has acquired. As a result, virtually no litigation has developed to test its acquisition practices in terms of amount and necessity.

BART has also begun to lease some of its space for commercial enterprises. BART approved a $1,000-a-month rent for a doughnut shop for a "visual" access window at one stop. At another, BART is leasing right-of-way space for parking. It has also received a proposal to put a restaurant over the ventilation shaft of the Ferry Building stop. Finally, BART is presently leasing connections from stops to commercial premises. Examples of such connections are Woolworth's Wells Fargo Building and California Savings & Loan Association. BART officials note that these arrangements do not yet produce significant income. They estimate that perhaps twenty-five such agreements have presently been negotiated.

Finally, it has been suggested that, given the broadening definition of public use in California, using the air rights over any public land, especially if validly acquired previously, should be legal in California. Arguing that a variety of arguments from the relatively difficult "economic necessity" (which is unclear in California) to the "surplus land" theory, the argument goes that:[46]

> *Ultimately, the extent to which air rights may be utilized as a tool of public finance will depend upon the skill and imagination of public planners. This article has hopefully demonstrated that, except in the clear case of a disguised gift of public land to private enterprises, the restraints upon air rights utilization are more illusory than real. (Emphasis added)*

INTERGOVERNMENTAL COOPERATION/JOINT DEVELOPMENT

There is ample precedent for joint development in Los Angeles. The problems are probably more practical than legal. For example, the California Health and Safety Code provides for limited intergovernmental cooperation, in the development of transportation systems.[47]

> *33448. In a county with a population of 4,000,000 persons or more, or in a city of 500,000 persons or more, an agency may, with the consent of the legislative body, acquire, construct, and finance by the issuance of bonds or otherwise a public improvement whether within or without a project area consisting of a transportation collection and distribution system and peripheral parking structures and facilities, including sites therefore, to serve the project area and surrounding areas, upon a determination by resolution of the agency and the legislative body that such public improvement is of benefit to*

the project area. Such determination by the agency and the legislative body shall be final and conclusive as to the issue of benefit to the project area.

The agency shall, in order to exercise the powers granted by this section, enter into an agreement with the rapid transit district which includes the county or city, or a portion thereof, in which agreement the rapid transit district shall be given all of the following responsibilities:

(a) to participate with the other parties to the agreement to design, determine the location and extent of the necessary rights-of-way for, and construct the transportation, collection, and distribution systems and related peripheral parking structures and facilities.

(b) to operate and maintain such transportation, collection, and distribution systems and related peripheral parking structures and facilities in accordance with the rapid transit district's outstanding agreements and the agreement required by this paragraph. (Emphasis added)

One of the major vehicles for joint development in California has been the joint powers agreement. Acting under such agreements, BART for example, has regularly condemned land for transit stops not only for BART, but for the municipal purposes of the local government with whom it has entered such agreements.[48] Thus, between the municipality and BART, ample power was generally found to effect the required acquisition. An example of such an agreement for slightly different purposes was one between BART, Oakland, Alameda County, and the not-for-profit Colliseum, Inc., to construct a walkway to the Colliseum sports complex from the nearest BART station.

Similar agreements between BART and CALTRANS, in which CALTRANS acted for BART, resulted in the acquisition of substantial portions of highway and rapid transit right-of-way together with BART parking areas.

However, as one expert pointed out, there may not be much incentive for a district or other agency which is merrily producing its own revenue to go into partnership with one that is not in a resource-pooling situation.

5c Financial Findings

The application of Value Capture in the Los Angeles area appears more timely and more promising from a financial standpoint than any of the other cities investigated as Los Angeles is embarking on a full scale commitment to a high-speed fixed guideway rapid transit system. Not only have various financial consultants suggested such policies, but legislation currently authorizes the use of special benefit assessments for transit districts. In short, the stage in Los Angeles is set for the Value Capture concept.

THE FINANCIAL ARENA FOR THE APPLICATION OF VALUE CAPTURE TECHNIQUES

The financial aspects of the Los Angeles situation are not uncommon to most cities. No major public transportation system in the nation, Los Angeles included, currently operates at a breakeven position. In addition, Los Angeles, like many others, has plans for transportation improvements which, when considered with realistic projections of operating costs and revenues for the existing bus system, will require substantial income other than the fare box.

This need for adequate and palatable source of funds to construct, implement, and operate a fixed guideway rapid transit system in the face of continued operating losses sustained by the transit entity since fiscal 1969 is one of the financial issues which Value Capture can address.

Since its inception, the present transit entity has experienced steadily increasing revenues. Operations have been consistently profitable until fiscal 1969. Since fiscal 1969, the entity has reported farebox revenues well below expenses. For fiscal 1974, the entity reported total operating revenues as $49,516,000 and total operating expenses before depreciation as $89,111,000, thereby sustaining an operating loss after depreciation of $43,821,000; however, this was offset by non-operating income in the amount of $48,370,000 consisting primarily of sales tax proceeds (Transit Development Act), plus interest income less interest expense. Despite these operating losses, the entity's financial condition is considered to be strong. One financial consultant warns that beyond 1981, inflationary pressures at current levels will cause future operating costs to exceed the revenues derived from the 1/2 percent sales tax and the fare box.

Thus, it is felt that new sources of funds are necessary to meet these future operating needs as well as potential high-speed fixed guideway facility costs.[50]

Financial advisors have indicated that unless substantial sums of additional income in the form of additional new sources are forthcoming, to continue to operate the entity might have to curtail its bus expansion program or levels of service.[51] Yet, the primary financial issues extends beyond present and future bus operations to the whole issue of the starter line financial plan.

The Los Angeles area is pursuing from $600 million to $800 million from UMTA for construction of one of the two proposed starter lines. The major problem is in determining and finding sources of funds (120-160 million) for the local match.[52] One important issue as seen by local analysts, is the degree to which local fiscal leverage can be achieved. As one financial consultant's report put it, "As the level of federal participation, in terms of actual dollars, can be expected to vary in future years, the (transit entity) should carefully consider the undertaking of any major capital projects which do not have a significant assured federal participation. To commit the bulk of the (transit entity's) local financial resources to independently finance an initial capital program can result in the entity being unable to provide sufficient local matching funds to undertake a larger capital program if greater federal assistance becomes available." The feeling among local analysts is that the base system cost MUST come from a 4-1 local/federal share.[53] In summary, local analysts are hopeful that Los Angeles will receive between $1.5 and $2.5 billion over the next 10 to 20 years under current and proposed federal funding policies and plans. There is strong reason to believe that given appropriate legal underpinnings and visionary administrators, the application of Value Capture in Los Angeles can have a significant effect on the availability of local funds.

The remainder of this FINANCIAL FINDINGS - LOS ANGELES section is organized into two parts. The first, Value Capture techniques - Findings presents key issues and problems associated with each technique in the Los Angeles situation. The second presents BOTTOM LINE calculations for 24 different stop applications in Los Angeles.

THE VALUE CAPTURE TECHNIQUES: FINDINGS

This section discusses problems and opportunities associated with the use of each of the Value Capture Policy techniques introduced in PART 2 of this report. Each is considered in terms of the tripartite functions of finance: 1) the investment decision to garner revenues including considerations of administrative costs, risk, liquidity, and overall yield; 2) the source of funds used to finance each investment alternative and related restrictions; and finally 3) the earnings stream itself.

Ad Valorem Property Taxation

Ad valorem taxation provides a means of capturing some of the financial benefits occasioned by the introduction of a high-speed fixed-guideway rapid transit systems. This recapture is most feasible in situations where an efficient assessment procedure is operational with yearly updates. To this end, the Tax Assessor's office of Los Angeles County, of all the cities investigated, has one of the most modern procedures with statistical update capacity. Herein lies the potential for this technique. While the methodology exists, its applicability is at best conditionally limited because of the lack of enabling ordinances.

The transit district has no direct taxing authority to levy ad valorem assessments for any other purpose than repayment for specific forms of bonded indebtedness, as authorized in the Public Utilities Code Section 30800 of the SCRTD Act.[54] In general, this tax levy is applicable where, for any cause, revenues of the district are inadequate to pay the debt service requirements, principal, interest, or sinking fund payments or reserves for revenue bonds of the district. This levy and collection of taxes by the district is proscribed as a covenant of any bond indenture. In addition, such a tax levy is security for debt service for bonds of the transit district for an improvement district. Moreover, such special levies provide debt service repayment for Limited Tax Bonds pursuant to Section 30920 of the SCRTD Act. To this extent, taxes are prohibited for certain purposes, namely to pay operating expenses of the district.[55] Any surplus funds received from taxes may be paid directly on construction costs allowable from the bonds payable therefrom, provided that the required debt service payments have been made. The collection of such tax levies are authorized by ordinance of the Board of Directors and further approved by the electorate of the district.

It would appear that some form of ad valorem taxation is possible, as suggested by the financial consultants of the transit district.[56] They note that ad valorem taxation is at best conditionally within SCRTD powers, provided that it can first be legislated.

Procedurally, this technique is perhaps the most easy to implement. As property taxes form the fundamental base of revenue for most units of local government, the collection mechanisms are already in place with low administrative costs being spread among all the taxing entities in the county. Annually, in Los Angeles County, each taxing entity files its tax rate within the County and the County Tax Collector collects the taxes levied by the cities, county, schools, and other special districts within the county. Taxes are payable in two installments, due each November 1 and April 1, respectively. To this extent, the stability of the tax receipts can be considered high and steady, with low variability annually.

It is worth noting that the districts' financial consultants calculated an annual return of $2,190,000 per 1 cent of tax based on an estimated 1974/1975 property valuation of $22.3 billion within the district.[57] It is believed that some form of limited property tax would distribute the costs of a mass transit system to a greater base than the concept of benefit zones, discussed next. Most important for Value Capture Policy, ad valorem taxation would begin to provide initial income to finance a fixed guideway system once the tax is authorized and administered. In the end, it must be emphasized that this type of taxation is keyed to a fixed uniform tax rate of an additional levy. Any increases in value would broaden the assessed valuation basis and would only in part be captured by this technique.

Benefit Zones Taxation

The Value Capture underpinning for benefit zones taxation is the basic assumption that this land, defined by a zone immediately adjacent to a rapid transit station, may be expected to increase in value at a more rapid rate than would be the case without the transit system.

The extent of such benefit zones is somewhat arbitrary, but is generally held to be a reasonable walking district about one-quarter to one-half mile from the transit line and/or radius of a station.

Under this technique, once the boundaries of the zones are established, a separate property tax on land would be imposed by a transit or development entity. This tax would be considered in addition to existing property taxes levied by other taxing agencies. In this manner, it is believed by many experts that the transit entity would directly receive some of the benefits it presumably created. In the opinion of financial experts, it is unlikely that this instrument would yield sufficient tax revenues to entirely finance a fixed guideway system; however, monies produced could be used to meet a portion of capital costs and provide capital assistance to meet maintenance and operation costs.[58]

Noteworthy, the SCRTD Act does not authorize the establishment of such benefit zones for the purposes outlined. Most experts agree, if permitted, it should be assumed that the provisions of Senate Bill 90 and Assembly Bill 2008 would require that such a tax be authorized by majority voter approval within each benefit zone. In short, the central emphasis of this tax application is the ability to provide a high and steady stability of income once the zones are established. This feature allows for an initial source of income for front-end construction costs once the precise alignment of a fixed-guideway system is known, and station locations are fixed.

Special Benefit Assessment District Taxation

As outlined in the Legal Element, the State of California is a pioneer in this technique with legislation as early as 1968. The legislation keys the tax receipts collected directly to the monies needed to meet debt service requirements of special assessment bonds for transit station facilities only.[59] The primary implication for Value Capture is that there are no provisions within these statutes to levy ad valorem assessments for any other purpose than debt repayment. An assessment district is an explicit fiscal transfer mechanism, typically taxing property in a defined area to pay for specified improvements or services (such as street lights, sidewalks, schools, sanitation services, or most anything else that can be agreed upon and afforded). It is imposed either by a legislature (such as a city council) or by a vote of the local electorate.[60]

A particular variation of the assessment district is the special (transit) benefit district which a city council or county board can establish in "areas adjacent to

any station...or along the route or lines of the transportation system...." Chapter 1325, Statutes of 1968 (Public Utilities Code Section 99000 et seq.) permits the establishment of special benefit districts and zones therein for the purpose of incurring a bonded indebtedness to acquire, construct, complete or repair transit station facilities.[61]

Currently in California, a transit board cannot itself establish such a district. It can only hold an election in such benefit areas it chooses to define on the issuance of bonds secured by the property assessments in those areas.[62]

It should be noted that the marketability and saleability of special assessment bonds do not particularly vie well with investors in the market place. In the area of taxation for special benefit assessments in Los Angeles, Wilshire Boulevard defaulted during the depression in the 1930's. Therefore, in the market place, investors have tended to shy away from such issues, notoriously labeled as "Palm Tree Bonds". The central issue is financial feasibility and security. In the 1930's in Los Angeles, the property values dropped to zero with no revenues being derived to meet debt service on such issues. In essence, what resulted was a catastrophic plummeting of land values, with the city losing tax revenues and bondholders taking a first lien on these properties which were then valueless.

Like other taxation applications, the income derived is considered to be highly stable. While this taxation instrument may be useful in specific situations, such as to pay for local distribution systems or transit station facilities and installation, it cannot be expected to provide a significant capital contribution to the initial financing of a regional mass transit system, under present legislation. Moreover, to repeat, many experts in the field consider it unfeasible for political reasons to suggest that this instrument be used to finance the construction of the line-haul system itself. The basis is that such taxation would not be extended to a very broad base, tending to be at once both regressive and progressive.[63]

Improvement District Taxation

Improvement District Taxation as a Value Capture technique suffers from many of the same problems as Special Benefit Assessment Districts previously discussed. The magnitude of the recapture is limited as these types of districts may only be created by the District's Board of Directors for special situations where the facilities to be constructed are of special benefit to an area and not to the District as a whole.[64]

The Public Utilities Code, Section 30960 of the SCRTD Act provides this instrument for incurring a bonded indebtedness to acquire, construct, complete, and repair facilities the District is empowered to own, construct, and operate which are necessary and convenient for carrying out the powers of the District, a fixed guideway mass transit system included.[65]

Similar to the provisions of Special Benefit Assessment Districts, the creation of such improvement districts requires hearings, the formation of boundaries, and financial obligations that are approved by the voters within the improvement districts by a margin of 60%. The major difference is that the tax to pay the bonds and interest thereon is levied upon all the taxable property in the improvement District, that is, land, improvements and personal property (less exemptions), and not just the land. Also, the purpose for which these district taxes can be utilized are very broad and not limited to just transit stations.[66]

In this respect, these provisions are suitable to finance construction of facilities and installations supplementing the basic transit system. Such facilities could include internal distribution systems, people movers, extra construction costs for pylons and other structural devices to support air rights or subsurface rights development for subsequent sale and/or lease.

Tax Increment Financing--Marginal Value Taxation

The prognosis for tax increment financing as a Value Capture technique is good in Los Angeles. Although, among the experts interviewed, a great amount of uncertainty exists as to the degree and extent of its potential or the form in which increments could be used.

In California, tax increment financing is available only to Redevelopment Agencies, pursuant to Community Redevelopment Law, Division 24, part I, State of California Health and Safety Code. California Redevelopment Agencies may issue tax allocation bonds, as well as promissory notes, and receive city cash advances, payable from property taxes collected from within a project

area, upon the increase in assessed valuation resulting from redevelopment. To undertake a redevelopment project and exercise the powers of condemnation, the area involved must be blighted or contain functional blight. Although tax increment powers as authorized by the State Constitution are limited to redevelopment agencies some experts note that this technique should be employed by a transit development agency (See LEGAL FINDINGS).

Operationally, tax increment financing works as follows:[67]

1) The adoption of the redevelopment plan established the "frozen base roll", which is the assessment role last equalized prior to the effective date of the ordinance approving the redevelopment plan. The assessed value is only frozen from the standpoint that the redevelopment agency receives any increase in tax revenues generated after the effective date of the redevelopment plan.

2) That portion of each year's tax collections which are produced by the application of the current year's tax rate upon the frozen base continues to be distributed to all taxing jurisdictions.

3) The remaining Tax Revenue -- revenue produced from higher assessed valuation due primarily to new development within the project area -- is withheld from other taxing jurisdictions and allocated to a special fund of the redevelopment agency.

The bonded indebtedness, and therefore the tax receipts are keyed to the costs of redevelopment in connection with the project. These costs may be land assembly costs, public improvements or public facilities constructed by the city or the agency, or repayment of bonded indebtedness.

Currently most developments occur by the following process:

1) The agency seeks out prospective tenants, lessees, buyers or developers prior to any land acquisition.

2) Once negotiation of terms is realized, the agency condemns the land, purchases it, and provides any necessary zoning changes.

3) Development takes place and revenues are realized by the agency.

Yet, according to Redevelopment Agency personnel, properties acquired in blighted areas are taken with writedown, where property acquired by the agency is resold to private developers at less than market value. In addition, leasehold revenues are also typically insufficient to cover the agency's cost, thus necessitating the extensive use of tax allocation financing.

In Los Angeles, the use of tax increment financing has been considered to finance the Bunker Hill People Mover, as an internal distribution system within the Bunker Hill Project of Los Angeles Community Redevelopment Agency in the CBD.. It is interesting to report the magnitude of tax increments generated by the Bunker Hill Project, as well as the scale of the bonded debt.[68]

Keyed to assessed valuation, effective from the date of the ordinance approving the redevelopment plan(1958-59 assessment roll). The following dollar amount in taxes have been collected and administered:[69]

(ASSESSED PROJECT VALUATION $)

Year	All Property	Excess over Base Roll	Tax Rate per $1,000
1972-73	$41,573,454	$35,441,389	$128.64
1971-72	$35,285,727	$29,153,657	$130.98
1970-71	$32,042,295	$25,910,225	$122,98

Note: Basis of Assessment is 25%.

The bonded debt as of June 30, 1973 was $18,000,000 secured by tax increments. These bonds have been issued continually. For example, 1971 series bonds were issued at par for $10,000,000 with an accepted cost of borrowing at 5.65%, with a call clause for 1980, as pointed out by the Agency's Comptroller.

The Bunker Hill People Mover provides an interesting example of not only tax increment financing, but also the intricacies of intergovernmental cooperation between the Community Redevelopment Agency, the City, and the transit entity. The initial planning for Bunker Hill called for an internal people mover system.

This system would connect peripheral parking structures with the project. Each stop is intended to have related commercial activities. It is proposed that the Bunker Hill People Mover be financed by a combination of bond proceeds and a federal grant. Two types of bond issues were considered. One, a revenue bond to be repaid from revenues derived from operation of the parking

structures and transit; and would be further secured by a long-term lease of the Bunker Hill People Mover from the Agency to the City.

The second type would be a tax allocation bond issue to provide a 20% local share to supplement the 80% federal grant for the transit portion.[70] It is intended that this system would directly interface with any proposal by the transit district for a fixed guideway system. The transit district would be the operator. However, upon termination of debt service for the tax allocation bonds, ownership would revert to the City of Los Angeles. Originally, according to a redevelopment agency official, planning called for an institutional framework in which the transit district's stops would be located at peripheral parking structures. Transit district would provide financing for the stops with the redevelopment agency using tax allocated bonds for parking structures secured by a leaseback to the transit district who would in turn lease the facilities to independent operators.

As an illustration of the many intricacies which arise in intergovernmental cooperation with mixed goals, priorities and tools, this procedure is not implementable because of the existing trust indenture of the transit district. Under the transit district's trust indenture, all revenues generated by transit district operations are of first position to meet debt service requirements. Thus, any revenues derived by the parking facilities would first be scheduled to meet debt service for this existing indenture, with excess revenues providing security for these remote/peripheral parking structures. As fare box revenues are insufficient to meet the transit district's trust indenture's debt service, parking revenues would be absorbed by the indenture, thereby leaving the parking structure's tax allocation bonds in a second position and unsecured. This is just one of the problems associated with intergovernmental arrangements.

A great deal of consideration has been given to the manner in which a transit district could participate with a redevelopment agency to realize income from tax increments. Such arrangements often run into limiting constraints concerning procedures by which each entity puts resources into the joint projects and further how they share in the benefits. A great deal of motivation (gain) is required on the part of both parties in order to provide adequate incentive to overcome such constraints.

Current controversy surrounds tax increment financing because in some cases regular services are increased while taxes are diverted. From a practical point of view, revenues from tax increments would not become available for several years, owing to the phasing and construction time for new development. Typically, after an ordinance has been authorized to create a tax increment district, it takes a little over two years to begin to realize the income stream, resulting in the inability to supply front-end capital.[71]

In financial terms, any evaluation of the income stream potential of tax increments must be considered in view of the difference between the empirical observation of tax increment financing and the theoretical economic arguments of marginal value taxation.

As a Value Capture Policy instrument, tax increment financing basically provides the procedure by which property taxes resulting from increased property values occasioned by construction of an improvement are pledged to the debt service on bonds issued to construct the improvement. It does not recapture the increase in land value, but only merely diverts tax revenues which would normally go to taxing entities in which the improvement is located to the entity which issued the bonds and paid for the improvement.

In spite of the many intricacies associated with cooperation between the transit district and the redevelopment agency tax increments as a Value Capture technique represent a fruitful way of recapturing value in California.

DEVELOP/HOLD/SELL--Real Property

The application of this Value Capture Policy technique involves the development of improvements around transit stops. The magnitude of revenues generated and the future income stream to be realized is a function of the land uses established by the transit or development entity. To this end, the key legal underpinning of this technique is the legal ability and justification of a transit or development entity to acquire, control and manage transit-related land parcels.

Among legal opinion, considerable agreement exists that a transit entity could condemn land around a transit stop for a land use such as "off-street parking". This is explicitly permissible under the statutory powers granted the Southern

California Rapid Transit District (SCRTD), Public Utilities Code, Section 30361, of the SCRTD Act. The transit district has utilized this authority in constructing park-and-ride facilities at a number of transit stops already.

Further, the Public Utilities Code states that "the district may acquire, construct, own, operate...any and all other facilities necessary or convenient for rapid transit service..."[72] According to one legal counsel of the district, attempts were made, under this authority to provide such supplemental services in the form of restaurant facilities and light commercial uses integrated into a mixed-use proposal for the El Monte Busway Terminal. This proposal faltered, not due to the particular technique, but the inability to market any leases to operators.

The ultimate potential of this technique is best realized with the development of more intensely related commercial uses which garners more income than parking or supplemental facilities. To this point, one eminent legal counsel suggests that the garnering of revenue marginally related to the entity's public purpose would be more easily accomplished if it took place on property already owned or acquired expressly for such related public purpose.[73]

In financial terms, the income generated by this instrument is a direct function of the type and scale of land uses developed. It is important to realize that the effectiveness of this technique is coupled with the concurrent development of the transit system, once the alignments have been fixed and stop locations are in place. The income stream generated is latent to the development of the system and will not provide front-end capital to defray capital costs of the system, except for later phases beyond the starter line. The stability of this income stream has the potential to be variable, fluctuating as a function of occupancy, absorption rates, and general market conditions. These functions create the risk element associated with any real property development.

The ability to implement this technique necessitates the expenditure of capital over and above the transit system itself, at least in the beginning until an income stream is generated. Presumably, the capital required initially can come from several sources; for instance, the district's own equity or capacity for bonded indebtedness. In Los Angeles, it is interesting to note that municipal parking facilities abound. These facilities are financed by parking revenue bonds, typically secured by revenues derived from operations with additional security added. For instance, the Los Angeles Parking Authority, with a bonded debt in June 30, 1973 of $31,850,000, debt service payments are payable from a special charge upon annual rental payable to the Authority by the City as provided by the lease agreement.[74] In essence, the city licenses an operator, collects a rental fee, and makes a lease payment to the Authority to meet debt service. The added security provision in the covenants of the bond issue is that the city form its own obligations and provides for any deficiency of facilities' revenues to meet debt service payments. These bonds have a conditional A rating by Moody's.[75] This is just one possibility analogous to development of transit-related facilities. The prognosis deemed worthy for consideration is that bonds could be publicly marketed on the promise of repayment from such lease or rental revenues.

In conclusion, given an underlying legal and financial argument for each specific project, the transit entity could sell such facilities for capital gains once development is completed, or in some future period. Clearly, the most tenuous restriction would be a penalty on early retirement of any bond issue to finance these facilities.

HOLD/SELL--Real Property

This policy instrument has already broached some discussion by the transit district's financial consultants as one possible method to capture the increases in land values that are expected to occur around transit stops to finance a fixed-guideway transit station.[115] In this situation, the transit entity would acquire all the land around a station location, hold it until the value inflates to some optimum, and then resell it, keeping the anticipated profits to repay the costs of the transit development. The necessary underpinning for this technique is the legal ability, the extent of acquisition and definition of public purpose, coupled with the legal and financial ability of the transit entity to divest itself of interest in acquired land parcels.

Presumably, the transit entity could divest itself of its interests in some future period and realize the profits at sale from such surplus rights-of-way, adjacent stop land parcels, and/or air rights. Again the key is the legal determination of the extent and scale of land that can be acquired initially. Financially, this determination is the key var-

iable for the expected return. The formula is outwardly simplistic: the more land acquired and the greater its development is enhanced the greater the profits. The air rights aspects of this technique appears to raise the fewest problems, as long as public purpose is justified.

A major pitfall outlined by financial experts is that funds to construct the transit system would have to be made available at the outset. No bonds could be publicly marketed on the promise of repayment from future land sales.[76]

The key question is how such a program premised on this technique could be financed, especially after eliminating the applicability of bonds. Some financial opinion suggests that through the Young Amendment to the 1964 Act, the U.S. Government might provide the initial capital. In their opinion, this would be the manner in which this technique could be implemented.[77] Assuming the availibility of federal grants and local share for the starter line, bonded indebtedness might not even be necessary to support this technique, given that the federal funding could support some land acquisition in supplemental condemnation, remnants, and air or sub-surface rights concurrent with the starter line. With this basis, surplus properties sold could bear some of the cost of the local share or under some conditions provide the total 20 percent necessary for local match on future extensions of the transit system in later phases. Here timing and the flows of revenues are the critical variable.

In general, the income generated can be expected to be high; however, the net return or profit is variable to the extent of appreciation already capitalized into the value prior to the transit or development entity's acquisition and determinant upon general market conditions. Such a lump sum return alleviates the variability in the future income; however, a risk element is attached to the timing of the sale and capture of the maximum value.

LEASE--Real Property

Recapture via leases approaches the taxation instruments and hold/sell in performance. Under this technique, the transit or development entity has the ability to enter into long-term ground leases or air rights leases of transit-related land interests. The returns and income stream that can be realized via this instrument is a direct function of the legal ability to acquire and control transit-related land parcels.

As pointed out in the Legal Findings, there are several cases in California of the condemnation and acquisition of land, subsequently leased to other parties. Section 30632 of the Public Utilities Code, the SCRTD Act, specifies:[78]

> *The district may lease or contract for the use of its facilities, or any portion thereof, to any operator, and may provide for subleases by such operator upon such terms and conditions it deems in the public interest.*

Presumably, these facilities might include parking lot air rights, abandoned bus yards, turnarounds, or the like. Whether surplus land is considered such a facility would require further legal determination.

Given the ability to acquire by some means land for such leasing purposes, the financial aspects addresses two major concerns: (1) the necessary funds for land acquisition, and (2) an evaluation of this technique. Presumably, bonds could be publicly marketed with the promise of repayment, secured by such leases, only if the contracts are negotiated and arranged prior to issues and a major, prominent lessee undertakes a lease of equal or greater length than the terms of the bond issue. This type of structure is envisioned as being similar to an industrial bond issue where lease revenues secure, and are adequate to cover all debt service repayments. Under some circumstances as suggested with the other real property techniques, bonded indebtedness may not be required as initial funds for land acquisition from federal sources may be available for the proposed starter line. Again, since leases would not provide any front-end capital, the future revenues could be used to later defray the initial local share or to finance the local share for future phases of system development.

The financial assessment of leasing is most akin to the Develop/Hold technique. The maximum potential to be realized should be premised on escalation clauses in the lease contracts keyed to changes in land valuation or rental values at specified intervals, a revaluative lease contract. In this manner, as the land is expected to appreciate in value, the lease revenues directly reflect this change. The income capacity is good and little variability would be expected given the long-run term of such leases. In short, less risk is associated with this instrument, as the risk element has been shift-

ed to the lessee and his solvency. Results of application of this technique are summarized in the BOTTOM LINE section.

PARTICIPATION--Real Property

In this technique, returns are keyed to the ability of the entity to do more in CONCERT WITH PRIVATE DEVELOPMENT INTERESTS.

For example, an entity may contribute land or air rights to a quasi-public consortium - and become - in effect - an equity partner in a joint public and private development project. The discussion in the legal sections outlines important issues in Los Angeles. Problems and opportunities for this technique vary as a function of the extent that a transit or development entity could legally subordinate some part of its transit-related land to another corporation private or quasi-public in nature for a return on a percentage basis. Although no relevant Los Angeles precedents were discovered in this research for this technique, it was considered in stop application examples discussed next. This technique is subject to the same risks, administrative issues and front-end constraints as are the Develop/Hold and Lease techniques already presented.

FINANCIAL BOTTOM LINE - Los Angeles Applications

Preceding discussion has been directed at general problems and opportunities for using each Value Capture technique in Los Angeles.

This section summarizes the financial results of eight Value Capture applications in Los Angeles at the three stop situations of Watts, USC/Exposition Park and Wilshire Boulevard mentioned in the Introduction to the Los Angeles Part.

In each alternative development programs were formulated based on the transit system characteristics assumed, general characteristics of the adjacent communities, and overall estimates of market potential for each area of Los Angeles. (These are presented in detail in the Community Design Section - Los Angeles.) For each alternative development program, appropriate Value Capture techniques were tested. Using Rice Center's computerized cash flow programs for pro forma investment analysis, each development situation with its Value Capture techniques were rigorously tested and an estimate of the recapture was made.

From the array of Value Capture techniques presented in the previous section, increment tax financing, real property development and holding for income production (develop/hold), land or air rights leasing, and participation in real property development were selected for application in hypothetical situations in Los Angeles.

Assumptions

Basic assumptions used in the pro forma investment analyses of these techniques included:

1.) Cost of borrowing for development entity was assumed at 6% unless joint development was assumed. In these cases when the private developer was the major participant - 9% was used.

2.) Accumulated cash returns from project were computed for a 25 year period.

3.) Unless stated, an annual inflation rate of 5% was assumed for both project revenues and operating expenditures.

4.) All data used in the analyses were in 1975 dollars.

5.) Transit segment costs were based on August 1975 estimates of unit costs for the Los Angeles Starter line alternatives.[79]

6.) Transit segment length was computed as the distance on both sides of the stop along the transit alignment to the midpoint of the distance between that stop and the next.[80]

7.) Transit segment cost estimates do not include the cost of the transit station itself. These have been included in the development costs as a "public institutional" use. Station configurations were assumed to vary with each alternative development configuration.

Beyond these 7 general assumptions, specific assumptions related to each alternative are presented with the proforma investment analyses results in each stop presentation.

Investment Yield

Overall, given the above assumptions and the results of the pro forma analyses, application of the Value Capture techniques as shown yields a wide variation in recapture. Incomes varies substantially as a function of the development intensity and the Value Capture techniques used.

Turning to the use of the financial recapture for defrayment of the transit development costs, it is worthwhile to note that the magnitude of transit system costs appear to have little relation to the percent of cost that can be defrayed from Value Capture. More extensive transit development configurations, ie. subway vs. grade alignments, may stimulate higher levels of transit related development, hence greater financial returns. This results in part from existing development intensities along the alignment; witness the Wilshire example.

The net cash accumulated for each alternative shown in Figure 5/2 assumes an opportunity cost at zero; thus assuming the development entity has no other use either real or implied for the funds it would invest in Value Capture. The net present value for each alternative shown, discounting at 8%, assumes alternative uses for funds invested would have a yield at the 8% rate. Thus, using both expressions of the project value one has the lower and upper bounds, respectively, for the transit entity's consideration of the Value Capture yield. Overall, then, one can summarize that Value Capture could defray from -5.2% to 322.7% or -2.9% to 193.8%, respectively, depending on form of discounting employed of the transit system segment development costs for the applications made. These figures are comparable to what a developer might receive as preliminary cash flow assessments on alternative projects. He would then drop or alter the less successful projects and/or pursue the better performers.

STOP SITUATION	DEVELOPMENT PROGRAM	VALUE CAPTURE TECHNIQUE APPLIED	LAND COST ($/sf)	PARCEL SIZE (ksf)	DEVELOPMENT CAPITAL COST ($ X 1000)	NET ACCUM. CASH FROM DEVELOPMENT ($ X 1000)	NET PRESENT VALUE (DISC@ 8%) ($ X 1000)	TRANSIT SEGMENT LENGTH (MI.)	TRANSIT SEGMENT COST ($ X 1000)	PERCENT COST DEFRAYED W/ ACCUM. CASH	PERCENT COST DEFRAYED W/ NET PRES. VAL. @ 8%
Los Angeles - Watts I (103 @ Graham Sts.)	Stop, Parking, Commercial	Develop/Hold	1.85	135.0	1,650.	2,490.	690.	2.3	7,900.	31.5	8.7
Los Angeles - Watts II	Stop, Parking	Develop/Hold	1.85	76.5	680.	- 410.	-268.	2.3	7,900.	-5.2	-2.9
Los Angeles - Expo I (Exposition Blvd. @ Figueroa)	Stop, Parking, Commercial, Office, Hotel	Develop/Hold, Land Lease	5.85	240.0	17,310.	116,380.	41,300.	1.5	35,750.	322.7	193.8
Los Angeles - Expo II	Stop, Parking, Commercial, Office, Hotel	Develop/Hold, Increment Tax Financing	5.85	276.0	1,590.	30,490.	11,330.	1.5	35,750.	85.3	45.3
Los Angeles - Expo III	Stop, Parking, Commercial, Educational Facil.	Develop/Hold	5.85	240.0	20,300.	17,910.	3,660.	1.5	35,750.	50.1	10.2
Los Angeles - Wilsh I (Wilshire Blvd. @ Western)	Stop, Parking, Commercial, Office	Participation, (10% partner)	18.50	230.4	51,980.	13,260.	4,240.	1.5	35,200.	37.7	12.0
Los Angeles - Wilsh II	Stop, Parking, Office, Commercial	Develop/Hold, Increment Tax Financing, Air Rights Lease	18.50	144.0	3,640.	50,740.	18,740.	1.5	35,200.	144.1	53.2
Los Angeles - Wilsh III	Stop, Parking, Commercial, Housing, Office	Develop/Hold, Land Lease	18.50	230.4	5,090.	107,360.	40,480.	1.5	35,200.	305.0	115.0

SUMMARY AND COMPARISON - INVESTMENT ANALYSIS RESULTS

Fig 5/2

Impact of Inflation

These results are sensitive to the inflation rates assumed in computation. Figure 5/3 compares analyses and illustrates this "sensitivity" by using three inflation rates for development project revenues and operating expenses over the twenty-five year term of each project. For example, in Alternative I for the USC/Exposition stop situation (EXPO I) the percent defrayed varied from -32% to + 85% depending on inflation rates of 3 or 8% respectively, rather than 5% as employed in calculating the results shown in Figure 5/2. The impact of inflation upon the outcome of investment decisions is dramatic.

STOP SITUATION	TRANSIT SEGMENT ESTIMATED COST ($ X 1,000)	3% INFLATION ASSUMED			5% INFLATION ASSUMED			8% INFLATION ASSUMED		
		ACCUMULATED CASH FROM PROJECT ($ X 1,000)	INTERNAL RATE OF RETURN (%)	PERCENT TRANS. COST DEFRAYED	ACCUMULATED CASH FROM PROJECT ($ X 1,000)	INTERNAL RATE OF RETURN (%)	PERCENT TRANS. COST DEFRAYED	ACCUMULATED CASH FROM PROJECT ($ X 1,000)	INTERNAL RATE OF RETURN (%)	PERCENT TRANS. COST DEFRAYED
Los Angeles - Watts I (103 @ Graham Sts.)	7,900	1,140	9.3'	14.4	2,490	11.0'	31.5	5,530	13.7'	70.0
Los Angeles - Watts II	7,900	-630	3.7'	-7.9	-410	-4.7'	-5.2	90	6.4'	1.1
Los Angeles - Expo I (Exposition Blvd. @ Figueroa)	35,750	79,490	21.2'	222.3	115,390	23.5'	322.7	214,160	27.0'	599.0
Los Angeles - Expo II	35,750	22,410	0.8'	62.7	30,490	1.1'	85.3	48,700	1.8'	136.2
Los Angeles - Expo III	35,750	4,310	7.7'	12.0	17,910	9.2'	50.1	48,560	11.7'	135.8
Los Angeles - Wilsh I (Wilshire Blvd. @ Western)	35,200	7,710	11.8'	21.9	13,260	13.7'	37.7	25,740	16.7'	73.1
Los Angeles - Wilsh II	35,200	31,290	2.9'	88.9	50,740	3.8'	144.1	94,650	5.3'	268.9
Los Angeles - Wilsh III	35,200	31,610	0.8'	89.8	107,360	1.1'	305.0	283,500	1.8' 114.8[2]	805.4

INFLATION EFFECTS - INVESTMENT ANALYSIS RESULTS

Fig. 5/3

Stream of Returns

Earlier discussion focussed in part on the ability of a Value Capture technique to garner financial returns throughout the project life. Some techniques, notably the real property hold/sell strategies, do not provide financial returns either early in the project life or in a smooth stream. Figure 5/4 provides a summary of returns for three intervals in the 25 year development period and a comparison of annual debt defrayment.

Overall, because of inflation, each application alternative experiences higher returns in successive years. Develop/Hold techniques appear to provide comparatively lower returns in early development years than do the Lease or tax increment techniques. The develop/sell and hold/sell techniques were not explored within this comparative analysis.

STOP SITUATION	VALUE CAPTURE TECHNIQUE APPLIED	DEBT SERVICE		YEAR 1		YEAR 5		YEAR 10	
		SYSTEM SEGMENT COST ($ X 1,000)	ANNUAL DEBT SERVICE REQMTS. ($ X 1,000)	YEAR 1 CASH FLOW	PERCENT OF DEBT SERVICE DEFRAYED	YEAR 5 CASH FLOW	PERCENT OF DEBT SERVICE DEFRAYED	YEAR 10 CASH FLOW	PERCENT OF DEBT SERVICE DEFRAYED
Los Angeles - Watts I (103 @ Graham Sts.)	Develop/Hold	7,900	711	-9.3	-1.3	16.5	2.32%	56.8	7.9%
Los Angeles - Watts II	Develop/Hold	7,900	711	-34.1	-4.8	-29.9	-3.8%	-23.4	-3.3%
Los Angeles - Expo I (Exposition Blvd. @ Figueroa)	Develop/Hold, Land Lease	35,750	3,217	1,774.8	55.2	2,424.0	75.3%	3,468.0	107.8%
Los Angeles - Expo II	Develop/Hold, Increment Tax Financing	35,750	3,217	567.7	17.6	722.3	22.4%	963.1	29.9%
Los Angeles - Expo III	Develop/Hold	35,750	3,217	-381.0	-116.5	-120.8	-3.8%	284.6	8.8%
Los Angeles - Wilsh I (Wilshire Blvd. @ Western)	Participation, (10% partner)	35,200	3,168	83.1	2.6	189.1	5.9%	354.3	11.2%
Los Angeles - Wilsh II	Develop/Hold, Increment Tax Financing, Air Rights Lease	35,200	3,168	943.7	29.8	1,130.4	35.7%	1,534.7	48.4%
Los Angeles - Wilsh III	Develop/Hold, Land Lease	35,200	3,168	2,317.4	73.1	2,318.8	73.2%	3,069.6	96.9%

STREAM OF RETURNS - INVESTMENT ANALYSIS RESULTS

Fig. 5/4

Evaluation of Techniques Applied

The range of techniques considered in the stop situation applications was based on the suitability each technique to the development proposal alternative made. Thus, for those applied it is possible to make some overall comparisons based on the pro forma investment analysis of each application.

Land or air rights leases[81] appear to have higher returns in Los Angeles than pure develop/hold strategies. Reasons for this include the assumed transit development entity's inability to develop and operate a full range of development uses due to the legislated purpose as provided of public mass transportation, and secondly, the ability of the development entity to pass on to the leasee development start up uncertainties (up to a default or foreclosure ceiling) and potential losses thus garnering an increasing positive income stream from the time of completion of the lease agreement.

Tax increment financing, too, appears to provide higher streams of returns than develop/hold strategies, yet one must consider some loss of community design control since the development entity cannot directly intercede in the stop related development. The analyses used accounted only for returns in an area of development immediately adjacent to the stop itself. Thus the results shown underestimate the maximum potential of tax increments when applied to "districts" of the magnitude and scale addressed in earlier discussion.

Participation as exemplified in the Wilshire Boulevard and Western Avenue alternative #1 (Wilshire I) produces less income than outright develop/hold strategies. The benefit from this technique would be to "open the door" to receiving income from site use programs more aggressive than those normally developed by the transit development entity itself. Incomes thus produced represent those from an "untapped" source not available to the transit development entity by itself as a project developer.

In conclusion, given the evidence of these example applications, the prognosis for Value Capture in Los Angeles is good. It is clear, however, that one should keep in mind the variability of the results; there are losers as well as winners. Cogent selection of appropriate stop locations, development programs supported by strong market potential, and effective techniques to recapture the resulting financial benefits would be essential ingredients in the final outcome for Value Capture in Los Angeles.

5d Community Design Findings

Application of Value Capture to selected transit stop situations in Los Angeles not only offers an indication of the financial benefits achievable, but it provides an opportunity to understand the community design benefits as well.

Generally Value Capture application in Los Angeles increased levels of employment opportunities, mobility and access to surrounding areas, and local services. Overall economic stimulation to the area may result but these must also be considered with redistribution effects which usually appeared. In one example, educational opportunities were improved through the provision of community college facilities within the stop development itself. The development in several cases removed deteriorating conditions as well as providing higher levels of amenities. The extent of this relates very directly to the Value Capture technique employed: develop/hold applications allow for higher levels of public participation in the development project design process. Localized natural environmental effects were usually negative due to increased intensity of development and traffic yet this result on the local community can be contrasted with the overall improvement in condition brought about by the introduction of transit into the city as a whole.

The major factors in the applications differentiating the community impact in Los Angeles included scale of development, facility type, and as noted above the Value Capture technique applied. Key characteristics of Los Angeles entering into illustrative stop selections include a large size of population and land coverage, concentrated low income minority areas, and high average mobility.

Los Angeles has a wide variety of special interest groups who are active on transit and development related issues. Stop selections attempted to reflect a variety of interest groups as well as community characteristics.

SELECTED STOP CHARACTERISTICS

The stop at Watts was selected to illustrate Value Capture potential in an impacted low-income minority area. The community is pri-

marily residential, and is largely developed with the exception of a substantial, cleared, redevelopment area.[82] The market for housing, commercial or industrial development is very weak.

The University of Southern California and Exposition Park stop presents a major concentration of institutional and recreational land uses. The area is primarily developed, and has a residential component, but key land uses are a museum and stadium complex and the university itself.

The Wilshire and Western location provides a major contrast and a look at the more commercial side of Los Angeles. The stop is in the Wilshire Center area, a highly developed and growing office and retail commercial district. A significant residential component in the area clearly establishes the Wilshire and Western stop as a major multi-use center, with a high degree of development potential.

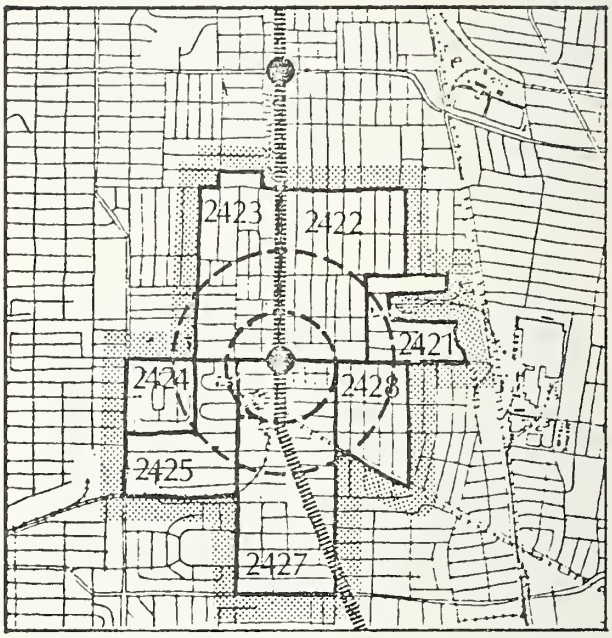
Figure 5/2 presents a more detailed comparison of the three stops. Following in the next sections is a detailed examiniation of the application of Value Capture to each stop situation. Discussions include a more detailed description of each stop community, alternative development programs, community design impacts and financial pro forma investment analysis.

Watts

STOP CONTEXT

Watts is a low income, black residential area in South Central Los Angeles which was planned for rapid transit service following the Southern Pacific/Pacific Electric railroad right-of-way in the Kaiser/DMJM plan of 1974. Watts received substantial notoriety in the late 1960's for riots which swept parts of the area, and led to a heavy local and national investment in social services in the area. The stop was selected for further study on the basis of illustrating potential for Value Capture in an area of poverty and minority concentration, as well as for investigation of interactions between Value Capture and the adjacent urban redevelopment area. There are, at this writing, several transit alignments which do not serve Watts. Many aspects of the stop situation, however, remain comparable with this and other major cities facing the development of transit.

The transit system proposal on which the current analysis is based provided fixed guideway rapid transit above grade utilizing the existing railroad right-of-way. The transit stop is located at 103rd and Graham, in the heart of Watts, and adjacent to the urban redevelopment area. The transit stop is above grade, provides very limited park and ride facilities, and facilitates connection with crosstown bus service on 103rd Street. The stop is expected to be more an origin than destination.



WATTS STOP CONTEXT Fig. 5/5

In terms of physical characteristics, the overall surrounding area is basically, low-density residential units, with scattered commercial areas, some concentrated public housing, and a large amount of cleared land in the redevelopment area. A relatively new low-rise housing project is immediately adjacent to the transit stop, but much of the rest of the area has been cleared. The widely acclaimed Watts Towers sculptural monuments, an old enclosed oil derrick and the old train station provide unique landmarks for the area. There is little vegetation of any kind. There are few local sources of air pollution or noise pollution, and no waterways to be affected by water pollution.

In terms of demographic characteristics, the Watts area under study includes 5,352 dwelling units housing 17,900 people. The area population is 92 percent black and about 7 percent Mexican-American. Families are large and incomes are very low. 41.5 percent of the population is below the poverty level. There is an exceptionally high percentage of children (up to 66%) and a low proportion of elderly. The balance of owned and rented units is the same as the city as a whole: About 38 and 57 percent respectively. Since 1960, the percent of rental units has increased, owned units have decreased, and the total number of housing units has decreased. What new construction there has been has been heavily subsidized.

Median rents, housing values and rent as a percent of income for lower middle income families are low. Robbery rates are high. Vacancy rates are moderate, slightly above the city average, and stability of residents is high.

The Watts area fares poorly on unemployment, education, poverty, equality, income, crime and housing quality. Only on cost of housing is the area above average.

Statistically, the need for improvement is great. The potential for improvement is small. Many service facilities in the area, for example, are abandoned for lack of operating funds. Little new residential construction is occurring in the area, and in all spheres of activity, there is little private investment in the area.

103rd AND GRAHAM Fig. 5/6

The resulting market potential and the potential for appreciation in value is very small.

The existing small commercial sector in the Watts area is currently overbuilt and scattered, resulting in marginal operation. Direct sales potential of transit ridership should create improved exposure and the stop area should be more than competitive for small convenience stores. The impact of Community redevelopment in the area should further improve market potential in the long run.

Major interest groups in the area, aside from resident, include the redevelopment entity, business interests, local agencies and community groups, the local housing authority, transportation companies, and groups interested in preservation of area landmarks.

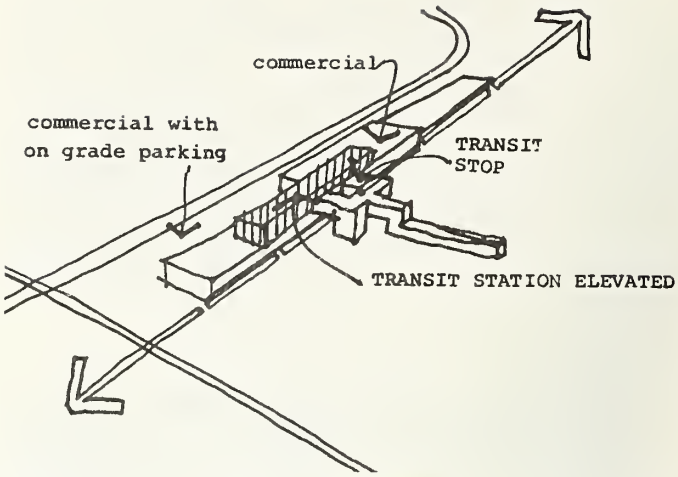
ALTERNATIVE #1 AERIAL VIEW Fig. 5/7

VALUE CAPTURE ALTERNATIVE #1

Watts Option #1 is based on the acquisition of a 135,000 square foot land parcel south of 103rd between the railroad right-of-way and Graham for transit stop construction and related parking. Land may be acquired through direct purchase or condemnation, or intergovernmental transfer if the mostly cleared parcel is already in public ownership.

The need for an above grade station suggested the possibility of developing and holding retail commercial facilities at grade below the station facility itself. Revenue would be realized through direct

ALTERNATIVE #1 PLAN Fig. 5/8



ALTERNATIVE #1 DEVELOPMENT COMPONENTS Fig. 5/9

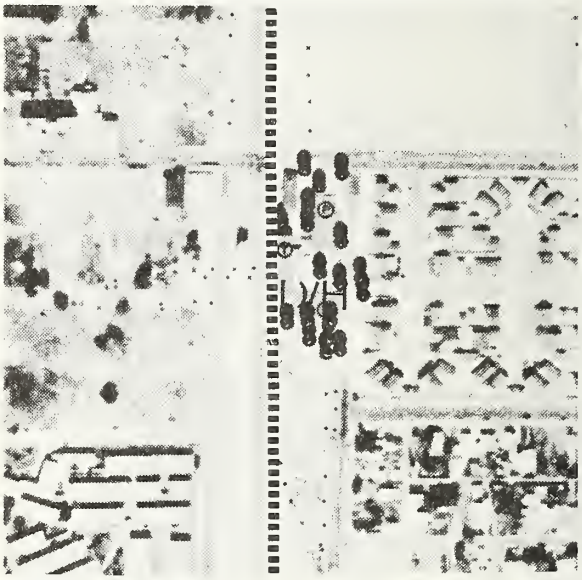
The illustrative program includes:

FACILITY			PARKING			TECHNIQUE
Type	Square Feet	Stories	Spaces	Type	Square Feet	
Ⓣ Transit Stop	12,000	1-2	265	Grade	79,500	Develop/Hold
Neighborhood	16,500	1	75		22,500	Develop/Hold

retail operations, or lease of individual shops to independent operators. A pedestrian crossing is proposed extending above the railroad line to residential areas to the west, and provision of trees and other amenities on site open space is anticipated.

VALUE CAPTURE ALTERNATIVE #2

Alternative #2 essentially illustrates in the Watts context, the baseline for the entire study: Development of the transit stop facilities and related parking only. 76,500 square feet of land is acquired through clearly established legal mechanisms of direct purchase or condemnation. The stop is developed and held by the transit or development entity, with a small income realized from very limited commercial facilities (such as newstands) which are included in the cash-flow model for all transit facilities. Some additional community enhancement benefits may be possible through the preservation and rehabilitation of the existing railroad station, which has been designated as a historic structure.



ALTERNATIVE #2 PLAN Fig. 5/10

The possibility of joint participation between the transit and the redevelopment entity in more aggressive development was considered, but after review, no opportunities were found to be available through joint participation that the parties could not achieve independently.

Illustrative program #2 includes:

FACILITY			PARKING			TECHNIQUE
Type	Square Feet	Stories	Spaces	Type	Square Feet	
Ⓣ Transit Stop	12,000	2	50	Grade	15,000	Develop/Hold

ALTERNATIVE #2 AERIAL VIEW Fig. 5/11

IMPACT ON THE COMMUNITY

Due to the fact that both alternatives are very small in scope, it is unlikely that any major impacts will be experienced. Particularly as no housing is demolished or provided, population effects should be negligible. Commercial development in the first option may be of sufficient scale and appropriate type to provide some new employment to area residents.

The possibilities for changes in activity patterns are linked mostly to the workability of park and ride provisions in Alternative #1, which could draw some new outsiders into Watts.

Environmental effects are also limited. Neither positive or negative changes in pollution are expected. On the other hand, simply grading and providing some trees or other vegetation on the site would represent an amenity improvement, as would demolition or rehabilitation of the abandoned railroad station.

Mobility and accessibility improvements are limited by the general lack of consequence of overall system configuration with employment or other desire lines of the Watts residents. Local effects are thus highly dependent on the overall systems ability to serve low income areas. Local accessibility to commercial facilities may be improved for directly adjacent residential areas in Alternative #1. Again, the effect of park-and-ride provisions is highly speculative.

Redistribution and net gain considerations are by and large limited to commercial facilities. Particularly in Alternative #1, retail services and employment may be primarily relocated from other areas within Watts. No effects on income distribution are expected.

Short range impacts are limited by the scale of construction anticipated, and by separation from any activities which could potentially be disrupted. Long range effects are closely linked to the success of area redevelopment efforts. In fact, transit development may measurably assist overall redevelopment efforts.

The overall evaluation suggests little change for local residents or outsiders. What benefits or costs as there are, such as historical preservation, amenities or jobs, can be expected to be generally positive for area residents and visitors.

		AREA MEAN	CITY MEAN	CHANGE DUE TO VCP		
				ALT#1	ALT#2	ALT#3
PRIMARY INDICATORS	% Labor Force Unemployed	18.6	7.0	L/B	0	
	% Population, 25 or over High School Graduates	30.4	62.0	0	0	
	% Households in Pove[illegible]	41.5	14.0	L/B	0	
	% of Tract with Air Pollution Problems	-	-	0	0	
	Median Family Income	4308	7511	H/B	0	
	Rent as % of Income: $5,000-$9,999 Income	17.0	20.8	0	0	
	% of Units with 1.01 Persons per Room or More	23.1	8.37	0	0	
SECONDARY INDICATORS	% of Tract with Water Pollution Problems	-	-	0	0	
	% of Tract with Noise Pollution Problems	-	-	0	0	
	% of Tract without Pollution	-	-	0	0	
	% of Households with no Auto	40.9	19.2	0	0	
	Median School Years Completed, 1970	10.1	12.4	0	0	

NOTE: Numerical increase in some indicators denotes improvement, in other cases it indicates worsening of the current status. All indicators are referenced to the immediate stop context.

KEY:
- HH - significantly higher indicator value
- H - somewhat higher
- O - no change
- L - somewhat lower
- LL - significantly lower
- BB - significant improvement
- B - some improvement
- O - no change
- W - somewhat worse
- WW - significantly worse

COMMUNITY QUALITY INDICATORS Fig. 5/12

FINANCIAL INVESTMENT ANALYSIS -
VALUE CAPTURE ALTERNATIVE #1

****

DEVELOP/HOLD WATTS1
DATA FOR THIS PART
****

DEVEL.USES	3
NO.OF YEARS	25
NO.OF PARTNR	1
YEAR OF SALE	30
% VACANCY	5.00
CAP. RATE	9.80
MORT:VAL.RTO	100.00
MTG.TERM	25.00
% L.T. INTRS	6.00
% RECAP@SALE	100.00
% COMMISSION	5.00
$EQUITY PAID	0.00
LANDCOS.$/SF	1.85
KSF PAR.SIZE	135.00
$ DEMOL.COST	0.00

FOR EACH PARTNER:

PARTNER NO.	1
% SHARE	100.00
% INCOME TAX	0.00
% CAP.GAINS	0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI	12000.
GRADE PARKIN	102000.
NEIGHBRHD CC	16500.

****

DEVELOP/HOLD WATTSI --- INCOME ANALYSIS ($ X 1000)

****

PREV.EQUITY ASSUMED: 0. COMPUTED EQUITY: 0.

TOTAL COST OF PROJ.: 1652. COMPUTED MOR-VAL RTO. 100.00

PERIOD	1	5	10	15	20	25
OPER INCOME	119.9	145.7	186.0	237.3	302.9	386.6
FIRST-AMORT	30.1	38.0	50.9	68.1	91.1	121.8
INTRST	99.1	91.2	78.3	61.1	38.1	7.3
DEPRECIATION	66.7	53.8	41.3	32.0	81.6	16.5
TAXABLE INC	-45.9	0.8	66.3	144.2	183.2	362.8
TAX BENEFIT	0.0	0.0	0.0	0.0	0.0	0.0
PRETAX C.F.	-9.3	16.5	56.8	108.1	173.7	257.4
C.F.AFT TAX	-9.3	16.5	56.8	108.1	173.7	257.4
ROR (CASH)	0.000	0.000	0.000	0.000	0.000	0.000
ROR(CASH) PARTNER- 1	0.0	0.0	0.0	0.0	0.0	0.0
INC.-F&C PARTNER- 1	119.9	145.7	186.0	237.3	302.9	386.6

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 7.850 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 10.960 %

****

COMB. TOTAL CASH FLOW ($ X 1000)

****

PERIOD	1	5	10	15	20	25
DEVELOP/HOLD WA	-9.3	16.5	56.8	108.1	173.7	257.4
ANNUAL CASH FLOW	-9.3	16.5	56.8	108.1	173.7	257.4
ACCUMULATED CASH	-9.3	16.3	215.7	648.5	1379.5	2490.8

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	2491.	1085.	930.	801.	692.	600.

FINANCIAL INVESTMENT ANALYSIS -
VALUE CAPTURE ALTERNATIVE #2

****

DEVELOP/HOLD WATTS2
DATA FOR THIS PART
****

DEVEL.USES	2
NO.OF YEARS	25
NO.OF PARTNR	1
YEAR OF SALE	30
% VACANCY	0.00
CAP. RATE	9.80
MORT:VAL.RTO	100.00
MTG.TERM	25.00
% L.T. INTRS	6.00
% RECAP@SALE	100.00
% COMMISSION	5.00
$EQUITY PAID	0.00
LANDCOS.$/SF	1.85
KSF PAR.SIZE	76.50
$ DEMOL.COST	0.00

FOR EACH PARTNER:

PARTNER NO.	1
% SHARE	100.00
% INCOME TAX	0.00
% CAP.GAINS	0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI	12000.
GRADE PARKIN	15000.

****

DEVELOP/HOLD WATTS2 --- INCOME ANALYSIS ($ X 1000)

****

PREV.EQUITY ASSUMED: 0. COMPUTED EQUITY: 0.

TOTAL COST OF PROJ.: 687. COMPUTED MOR-VAL RTO. 100.00

PERIOD	1	5	10	15	20	25
OPER INCOME	19.6	23.8	30.3	38.7	49.4	63.1
FIRST-AMORT	12.5	15.8	21.1	28.3	37.9	50.7
INTRST	41.2	37.9	32.6	25.4	15.8	3.0
DEPRECIATION	18.1	15.6	13.0	10.9	17.5	7.3
TAXABLE INC	-39.8	-29.7	-15.2	2.4	16.1	52.7
TAX BENEFIT	0.0	0.0	0.0	0.0	0.0	0.0
PRETAX C.F.	-34.1	-29.9	-23.4	-15.0	-4.3	9.4
C.F.AFT TAX	-34.1	-29.9	-23.4	-15.0	-4.3	9.4
ROR (CASH)	0.000	0.000	0.000	0.000	0.000	0.000
ROR(CASH) PARTNER- 1	0.0	0.0	0.0	0.0	0.0	0.0
INC.-FOC PARTNER- 1	19.6	23.8	30.3	38.7	49.4	63.1

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) -2.690 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) -4.680 %

****

COMB. TOTAL CASH FLOW ($ X 1000)

****

PERIOD	1	5	10	15	20	25
DEVELOP/HOLD WA	-34.1	-29.9	-23.4	-15.0	-4.3	9.4
ANNUAL CASH FLOW	-34.1	-29.9	-23.4	-15.0	-4.3	9.4
ACCUMULATED CASH	-34.1	-160.5	-291.1	-383.5	-427.4	-409.2

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	-409.	-306.	-290.	-276.	-263.	-251.

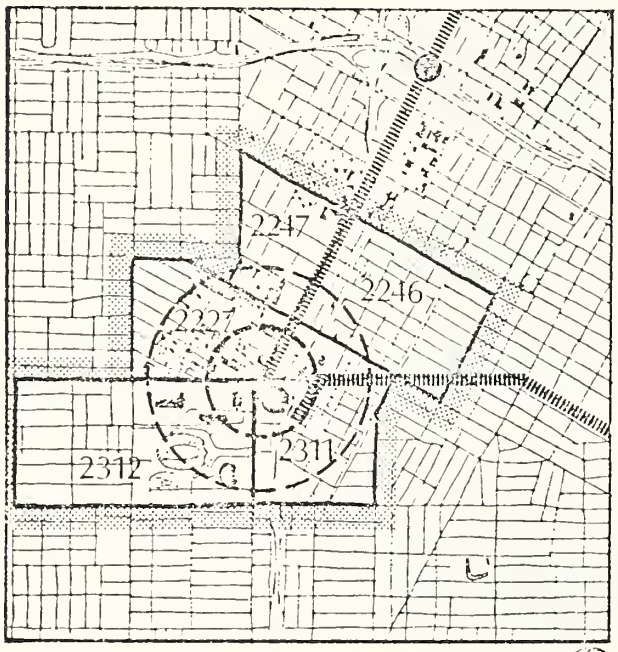
U.S.C./Exposition Park

STOP CONTEXT

The USC-Exposition Park Stop on the South Central Transit Corridor was selected for consideration as an example of Value Capture potential in relation to major public and institutional settings. The Exposition Park facilities, including the coliseum and major museums, combined with the Campus of the University of Southern California provide a context which is challenging yet comparable with many areas in other cities.

The stop location used as a basis of this study is located on the southeast corner of the intersection of Exposition Boulevard and Figueroa. In the area the transit line emerges from downtown subway construction and transitions to an above grade route that either will turn east or continue directly south. The stop is expected to be a major destination point but also to originate significant transit utilization. Some park and ride facilities are considered, as well as some modal interchange.

The physical environment surrounding the proposed development is generally fully developed, but with widely varying forms of development. The Exposition Park area features major public facilities in a park-like setting, with activity focused on major events. The USC campus



USC/EXPOSITION PARK STOP CONTEXT Fig. 5/13

INTERSECTION OF EXPOSITION BLVD. AND FIGUEROA Fig. 5/14

is a more complex agglomeration of university structures with an active but basically inward focusing campus activity. The surrounding residential area provides mainly older low-rent structures housing students and low income families. The area along Figueroa shows some major commercial development, while the area east of the harbor freeway is largely industrial. Stately palms lining the boulevards provide an amenity contrast with the deteriorating buildings which often front on the higher quality institutional settings. The Harbor freeway, major local streets, buses, industries and the railway create inter-related noise and air pollution problems which contradict the quiet, institutional settings.

In terms of demographic characteristics, the area is also very heterogeneous, showing great variations between census tracts. The 15,971 residents and 5,631 dwellings appear to be united only by geographical proximity. In the cluster analysis of L.A., for example, the 5 census tracts in the area fell into 4 widely differing clusters.

All tracts share a low proportion of elderly residents, a high proportion of rented units (75-88 percent), low populations per housing unit, and high vacancy rates.

Census tracts 2227 and 2247 appear to represent university related areas characterized by high turnover (only 11 to 15 percent had the same residence from 1965-1970), low numbers of children (7 to 11 percent), low proportions black or Spanish residents, and high community enhancement scores. The tracts rank very well on unemployment, suicide rates, robbery rates, and education levels. Income is very low ($997-$1374 a year) and a high percentage of families are in the census poverty category, but this is not exceptional for students.

Census tracts 2246 and 2312 appear to be more stable family residential areas dominated by Mexican-American and black populations respectively. The numbers of children are high, there are more owned homes, transiency is lower, but still above the city average, rents are very low, and the value of owned homes is low. In terms of quality, these areas have considerable families in the census poverty category, low incomes, high crime rates, low access to automobiles and substantial overcrowding. Tract 2246 is, in particular, subject to overcrowding, low education levels and high concentrations of census designated poverty.

Census tract 2311 is generally a very mixed tract falling between the other two groups of tracts.

Cluster data indicates that tract 2312 is part of the large, homogeneous, south central L.A. area termed "richest of the poor", while tracts 2311 and 2246 are part of a cluster termed "older housing", mainly occurring to the north of the stop area.

Housing throughout the area is old, with a high percentage pre-dating 1939. Multiple unit dwellings are newer, and are probably replacing slowly the single family homes. Little change in proportions of owners and renters occurred between 1960 and 1970 however, and the only significant increase has been in the number of vacant units.

Aside from residents and students, visitors to Exposition Park, tourists, industrial employees, commercial businesses, and the redevelopment entity, which controls a large area of land just north of the stop, are expected to be major interest groups in the area.

Access to the area is already good, but particularly in the wedge between the Harbor Freeway and the USC-Exposition Park complex, the potential for land value appreciation due to transit may be very great. Ridership due to existing uses is expected to be substantial, and reinforcing uses may multiply the area's development potential.

Inadequate information is available to clearly identify market potential, particularly as the site in question is surrounded by widely divergent land uses. It has been speculated that there is a potential market for office space related to the university and the industrial areas to the east; that there is a market for hotel space in relation to USC and Exposition park facilities, and that more concentrated commercial space with transit proximity could compete favorably with the existing scattered, small scale commercial facilities currently existing in southeast L.A. It was assumed that no housing units could be justified due to social resistance by higher income families.

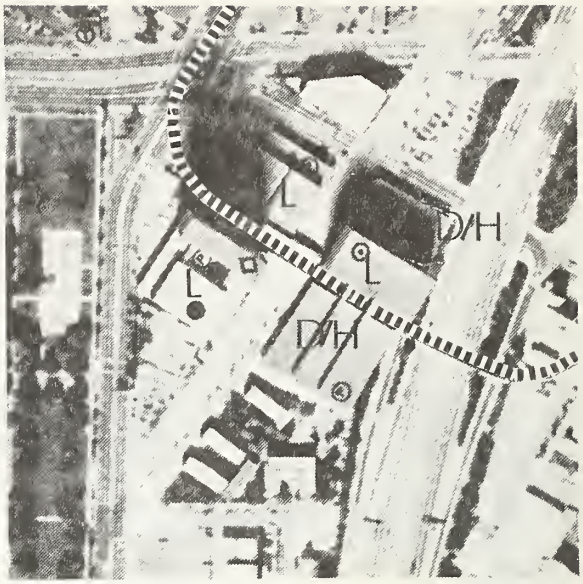
ALTERNATIVE #1 AERIAL VIEW Fig. 5/15

VALUE CAPTURE ALTERNATIVE #1

Value capture alternative #1 is based on optimistic private development expectations and aggressive value capture strategies. 240,000 square feet of land is considered for direct acquisition for transit facilities, related present and future parking needs, and limited excess condemnation utilizing remnant theory. Value is captured through the development and operation of large-scale public

parking facilities in conjunction with the lease of land or air rights over parking for private development. The transit stop itself may be above or below grade, but serves as the critical focal element for development, as well as being linked above or below existing major streets to the USC campus and Exposition Park. Facilities for modal transfer from local minibus, local bus and express bus service on the Harbor Freeway to and from the fixed guideway system are proposed.

The illustrative program focuses on hotel, retail commercial and office uses which can capitalize on proximity to the existing institutions. The program includes:

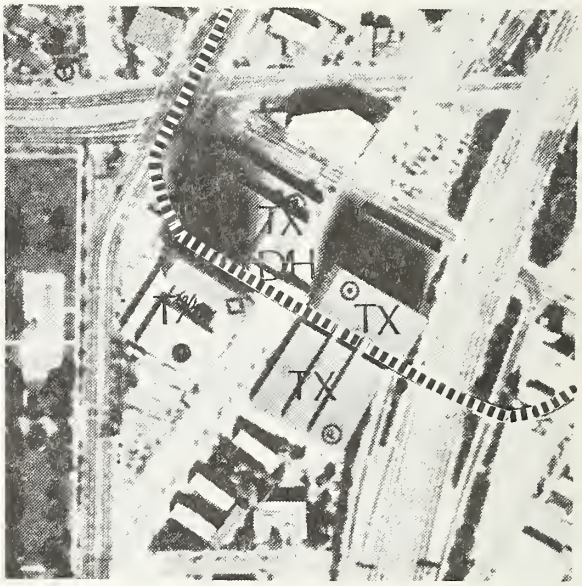


ALTERNATIVE #1 PLAN Fig. 5/16

	FACILITY			PARKING			TECHNIQUE
	Type	Square feet	Stories	Spaces	Type	Square feet	
Ⓣ	Transit Stop	16,000	2	240 2013	Grade Struct	72,000 704,550	Develop/Hold
	Neighborhood Commercial	12,000	1	-	-	-	Develop/Hold
	Community Commercial	96,000	2	-	-	-	Land Lease/ Air Rights Lease
◇	Hotel	216,000	20	-	-	-	Land Lease/ Air Rights Lease
⊙	Mid-High Rise Office	320,000	16	-	-	-	Land Lease/ Air Rights Lease

VALUE CAPTURE ALTERNATIVE #2

Using the same facility program as Option 1, the second strategy proposes Value Capture through incremental value taxation. The only site acquisition proposed is 36,000 square feet directly required for the 16,000 square foot transit stop to be developed by the transit or development entity. Other parcels are considered to be developed by private interests, subject only to existing controls such as zoning. An incremental tax district is established in the wedge defined by Exposition Park, the south edge of the redevelopment district, and the Harbor Freeway. For cash flow purposes, the district is assumed to be the same as the land acquisition in alternative #1. A key assumption of the tax option is that the same extent of development would be carried out by private developers as was illustrated for transit or development entity in option #1.



ALTERNATIVE #2 PLAN Fig. 5/17

The illustrative program includes:

	FACILITY			PARKING			TECHNIQUE
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
Ⓣ	Transit Stop	16,000	2	-	-	-	Develop/Hold
	Neighborhood Commercial	16,000	1	40	Grade	12,000	Tax
	Community Commercial	96,000	2	200 200	Grade Struct	60,000 70,000	Tax
◇	Hotel	216,000	20	468	Struct	163,800	Tax
⊙	Mid-High Rise Office	320,000	16	1,345	Struct	470,750	Tax

ALTERNATIVE #2 AERIAL VIEW Fig. 5/18

ALTERNATIVE #3 PLAN Fig. 5/19

VALUE CAPTURE ALTERNATIVE #3

Alternative #3 considers a substantially different facility program, and a related change in land acquisition and value recapture techniques. The key change is a development emphasis on a public educational institution as the major facility, which clarifies land acquisition for public purpose, and use of public funds for development. Land acquisition is 240,000 square feet, and is acquired through purchase or condemnation.

The illustrative program includes:

	FACILITY			PARKING			TECHNIQUE
	Type	Square feet	Stories	Spaces	Type	Square feet	
Ⓣ	Transit Stop	16,000	2	-	-	-	Develop/Hold
○	Classroom/Office Educational facility	240,000	10	742 263	Struct Grade	259,640 78,900	
	Local Commercial	130,000	3	100 190	Struct Grade	35,000 57,000	

IMPACT ON THE COMMUNITY

Significant, varied community enhancement impacts are expected. Neither scheme, however, demolishes significant existing housing or provides new housing, so population impacts are expected to be minimal. There would be some effects on activity patterns, particularly if retail commercial facilities are successful; and there would be some employment opportunities. The provision of educational facilities, probably of the community college type, provide a potential net increase in educational benefits in alternative #3, which though small numerically would represent a net positive benefit rather than redistribution.

The scale of development and number of new parking spaces are projected to increase traffic densities and auto-related pollution in spite of moderating effects of transit utilization. Removal of some deteriorated structures and improvement of amenities in the immediate area may significantly improve the desirability of the area to residents, students and visitors. No significant variations between schemes are projected.

Major access and mobility benefits to stop related development are extremely likely. The combined effect of new transit options, improved facilities, coordination of various transit modes, new parking options for Coliseum events, good linking of local stop to overall system, improvement of local area amenities and the draw of transit related facilities should be a major net improvement. Options 1 & 2 are expected to be most beneficial to tourists and visitors from outside the local area, while option 3 should better serve neighborhood and Southeast Los Angeles residents.

Some redistribution/net gain issues have already been considered. In addition, however, local commercial businesses may be redistributed significantly due to demolition, new construction and changed market and utilization patterns. The key distribution issue, however, is the emphasis on visitors and tourists in options 1 & 2 versus local focus in option 3.

Short-range impacts include business relocation, demolition, and major construction nuisances. In the long run, access and mobility improvements, amenities and services changes are expected to predominate. There should be a phasing difference between the tax scheme, leasing, and direct development, as they suggest possibilities for incremental as opposed to monolithic development. It is difficult however, to assign positive or negative connotations to these changes.

In the final analysis, the overall impact at USC/Exposition Park is expected to be positive, though some groups, such as businesses to be relocated, may suffer a net loss. Improvements are expected to be more important to visitors and tourists in alternatives #1 and 2, and more important to local area residents in alternative #3.

	USC/EXPOSITION PARK	AREA MEAN	CITY MEAN	CHANGE DUE TO VCP		
				ALT#1	ALT#2	ALT#3
PRIMARY INDICATORS	% Labor Force Unemployed	6.9	7.0	L/B	L/B	L/B
	% Population, 25 or over High School Graduates	51.5	62.0	O	O	H/B
	% Households in Poverty	30.4	14.0	L/B	L/B	L/B
	% of Tract with Air Pollution Problems	-	-	H/W	H/W	H/W
	Median Family Income	2802	7511	H/B	H/B	H/B
	Rent as % of Income: $5,000-$9,999 Income	16.8	20.8	O	O	O
	% of Units with 1.01 Persons per Room or More	16.4	8.37	O	O	O
SECONDARY INDICATORS	% of Tract with Water Pollution Problems	-	-	O	O	O
	% of Tract with Noise Pollution Problems	-	-	H/W	H/W	H/W
	% of Tract without Pollution	-	-	L/W	L/W	L/W
	% of Households with no Auto	29.3	19.2	O	O	O
	Median School Years Completed, 1970	11.4	12.4	O	O	H/B

NOTE: Numerical increase in some indicators denotes improvement, in other cases it indicates worsening of the current status. All indicators are referenced to the immediate stop context.

KEY:
- HH - significantly higher indicator value
- H - somewhat higher
- O - no change
- L - somewhat lower
- LL - significantly lower
- BB - significant improvement
- B - some improvement
- O - no change
- W - somewhat worse
- WW - significantly worse

COMMUNITY QUALITY INDICATORS Fig. 5/20

FINANCIAL INVESTMENT ANALYSIS -
VALUE CAPTURE ALTERNATIVE #1

```
*********************
DEVELOP/HOLD  EXEC 1
DATA FOR THIS PART
*********************

DEVEL.USES          4
NO.OF YEARS        25
NO.OF PARTNR        1
YEAR OF SALE       30

% VACANCY         0.00
CAP. RATE        9.80
MORT:VAL.RTO   100.00
MTG.TERM        25.00
% L.T. INTRS     6.00
% RECAP@SALE   100.00
% COMMISSION     5.00
$EQUITY PAID     0.00
LANDCOS.$/SF     5.85
KSF PAR.SIZE   240.00
$ DEMOL.COST    50.00

FOR EACH PARTNER:

PARTNER NO.         1
% SHARE        100.00
% INCOME TAX      0.00
% CAP.GAINS       0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI   16000.
NEIGHBORHO CC  12000.
GRADE PARKIN   72000.
STRUCTURED P  704550.
```

```
*****************************************************************
DEVELOP/HOLD  EXEC 1 ===  INCOME ANALYSIS   ( $ X 1000 )
*****************************************************************

PREV.EQUITY ASSUMED:        0.  COMPUTED EQUITY:            0.
TOTAL COST OF PROJ.:    17311.  COMPUTED MOR-VAL RTO.     100.00

PERIOD                  1       5      10      15      20      25

OPER INCOME        3108.7  3778.7  4822.6  6155.0  7855.5 10025.8

FIRST-AMORT         315.5   398.3   533.1   713.4   954.6  1277.2
      INTRST       1038.6   955.8   821.1   640.8   399.5    76.6

DEPRECIATION        597.2   510.8   420.6   346.7   325.9   233.8
TAXABLE INC        1472.9  2312.0  3580.9  5167.6  7130.1  9715.3
TAX BENEFIT           0.0     0.0     0.0     0.0     0.0     0.0
PRETAX C.F.        1754.6  2424.5  3468.5  4800.9  6501.4  8671.6
C.F.AFT TAX        1754.6  2424.5  3468.5  4800.9  6501.4  8671.6

ROR (CASH)         0.000   0.000   0.000   0.000   0.000   0.000

RCR(CASH)
  PARTNER=     1     0.0     0.0     0.0     0.0     0.0     0.0

INC.-FOC
  PARTNER=     1  3108.7  3778.7  4822.6  6155.0  7855.5 10025.8

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10)  20.340 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25)  23.520 %
```

```
*********************
LAND/AIR-LEAS EXEC 1
DATA FOR THIS PART
*********************

DEVEL.USES          3
NO.OF YEARS        25
YEAR OF SALE       30

% VACANCY         5.00
CAP. RATE        9.80
% RECAP@SALE     2.00
% COMMISSION     5.00
% L.T. INTRS     9.00

LANDCOS.$/SF     0.00
KSF PAR.SIZE     0.00
$ DEMOL.COST     0.00

DEVELOPMENT PROGRAM:

COMMUNITY CC   96000.
HOTEL         216000.
MID/HIGH RIS  320000.
```

```
*****************************************************************
LAND/AIR-LEAS EXEC 1 === LAND LEASE/SALE ANAL.($ X 1000)
*****************************************************************

TOTAL COST OF PROJ.:        0.  (INCL. ACQ.+ CLEAR. ONLY)

PERIOD                  1       5      10      15      20      25

LEASE INCOME         20.2    20.2    25.8    33.0    42.1    53.7

REV AT SALE         206.6   206.6   263.7   336.5   429.5   548.2
TOT TAXES             0.0     0.0     0.0     0.0     0.0     0.0
EXPN OF SALE         10.3    10.3    13.2    16.8    21.5    27.4
PROC AFT TAX        196.3   196.3   250.5   319.7   408.0   520.8

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10)    -NO-

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25)    -NO-
```

```
*****************************************************************
COMB. TOTAL CASH FLOW ($ X 1000)
*****************************************************************


PERIOD                    1       5      10      15      20      25

DEVELOP/HOLD  EX     1754.6  2424.5  3466.5  4800.9  6501.4  8671.6
LAND/AIR-LEAS EX       20.2    20.2    25.8    33.0    42.1    53.7

ANNUAL CASH FLOW     1774.8  2444.8  3494.3  4833.8  6543.4  8725.3
ACCUMULATED CASH     1774.8 10508.1 25790.1 47164.6 76315.1115389.6


$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %        0.00    5.00    6.00    7.00    8.00    9.00
PRESENT VALUE $      115390.  58139.  51587.  46032.  41300.  37253.
```

FINANCIAL INVESTMENT ANALYSIS -
VALUE CAPTURE ALTERNATIVE #2

```
*******************
DEVEL HOLD EXPO 2
DATA FOR THIS PART
*******************

DEVEL.USES            1
NO.OF YEARS          25
NO.OF PARTNR          1
YEAR OF SALE         30

% VACANCY           0.00
CAP. RATE          9.80
MORT:VAL.RTO     100.00
MTG.TERM          25.00
% L.T. INTRS       6.00
% RECAP@SALE     100.00
% COMMISSION       5.00
$EQUITY PAID      0.00
LANDCOS.$/SF      5.85
KSF PAR.SIZE     36.00
$ DEMOL.COST      7.50

FOR EACH PARTNER:

PARTNER NO.           1
% SHARE          100.00
% INCOME TAX       0.00
% CAP.GAINS        0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI    16000.
```

```
*****************************************************************
DEVEL HOLD EXPO 2    ---  INCOME ANALYSIS   ( $ X 1000 )
*****************************************************************

PREV.EQUITY ASSUMED:          0.  COMPLTED EQUITY:            0.
TOTAL COST OF PROJ.:       1591.  COMPLTED MOR-VAL RTO.    100.00

PERIOD                    1       5      10      15      20      25

OPER INCOME            11.7    14.2    18.1    23.1    29.5    37.7

FIRST-AMORT            29.0    36.6    49.0    65.6    87.8   117.4
      INTRST           95.5    87.9    75.5    58.9    36.7     7.0

DEPRECIATION           41.2    36.5    31.3    26.9    23.1    19.8
TAXABLE INC          -125.0  -110.1   -88.7   -62.7   -30.3    10.8
TAX BENEFIT            0.0     0.0     0.0     0.0     0.0     0.0
PRETAX C.F.          -112.8  -110.3  -106.4  -101.4   -95.0   -86.8
C.F.AFT TAX          -112.8  -110.3  -106.4  -101.4   -95.0   -86.8

RCR (CASH)            0.000   0.000   0.000   0.000   0.000   0.000

RCR(CASH)
  PARTNER-     1      0.0     0.0     0.0     0.0     0.0     0.0

INC.-F&C
  PARTNER-     1     11.7    14.2    18.1    23.1    29.5    37.7


INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10)  -0.230 %
INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25)  -1.130 %
```

FINANCIAL INVESTMENT ANALYSIS
VALUE CAPTURE ALTERNATIVE #3

****
DEVEL HOLD EXFC 3
DATA FOR THIS PART
****

DEVEL.USES	5
NO.OF YEARS	25
NO.OF PARTNR	1
YEAR OF SALE	30
% VACANCY	5.00
CAP. RATE	9.80
MORT:VAL.RTO	100.00
MTG.TERM	25.00
% L.T. INTRS	6.00
% RECAP@SALE	100.00
% COMMISSION	5.00
$EQUITY PAID	0.00
LANDCOS.$/SF	5.65
KSF PAR.SIZE	240.00
$ DEMOL.COST	50.00

FOR EACH PARTNER:

PARTNER NO.	1
% SHARE	100.00
% INCOME TAX	0.00
% CAP.GAINS	0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI	16000.
COMMUNITY CC	130000.
EDUCATIONAL	240000.
STRUCTURED P	106500.
GRADE PARKIN	135600.

****
DEVEL HOLD EXFC 3 --- INCOME ANALYSIS ($ X 1000)
****

PREV.EQUITY ASSUMED: 0. COMPUTED EQUITY: 0.
TOTAL COST OF PROJ.: 20305. COMPUTED MOR-VAL RTO. 100.00

PERIOD	1	5	10	15	20	25
OPER INCOME	1207.4	1467.6	1873.0	2390.5	3050.9	3893.8
FIRST-AMORT	370.1	467.2	625.3	836.8	1119.8	1498.0
INTRST	1218.3	1121.2	963.1	751.6	468.6	89.9
DEPRECIATION	728.7	617.5	503.3	411.3	412.1	272.4
TAXABLE INC	-739.6	-271.1	406.6	1227.6	2170.2	3531.6
TAX BENEFIT	0.0	0.0	0.0	0.0	0.0	0.0
PRETAX C.F.	-381.0	-120.8	284.6	802.1	1462.5	2305.4
C.F.AFT TAX	-381.0	-120.8	284.6	802.1	1462.5	2305.4
ROR (CASH)	0.000	0.000	0.000	0.000	0.000	0.000
ROR(CASH) PARTNER= 1	0.0	0.0	0.0	0.0	0.0	0.0
INC.-F&C PARTNER= 1	1207.4	1467.6	1873.0	2390.5	3050.9	3893.8

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 6.310 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 9.200 %

****
COMB. TOTAL CASH FLOW ($ X 1000)
****

PERIOD	1	5	10	15	20	25
DEVEL HOLD EXFO	-381.0	-120.8	284.6	802.1	1462.5	2305.4
ANNUAL CASH FLOW	-381.0	-120.8	284.6	802.1	1462.5	2305.4
ACCUMULATED CASH	-381.0	-1270.5	-697.9	2227.2	8154.5	17913.7

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	17914.	6678.	5478.	4485.	3661.	2974.

****

INC.TAX EXPC 2
DATA FOR THIS PART
****

DEVEL.USES	6
NO.OF YEARS	25
% VACANCY	5.00
CAP. RATE	9.80
LANDCOS.$/SF	5.85
KSF PAR.SIZE	240.00
% ASSES.RTO.	25.00
ADVAL.TAX RT	0.00
INC.TAX RATE	6.92
INPR.VALUE $	50.00

DEVELOPMENT PROGRAM:

NEIGHBRHD CC	12000.
GRADE PARKIN	72000.
STRUCTURED P	704550.
COMMUNITY CC	96000.
HOTEL	216000.
MID/HIGH RIS	320000.

****

INC.TAX EXPC 2 --- TAXATION ANALYSIS ($ X 1000)

****

PERIOD	1	5	10	15	20	25
TAX BASE TOT	10196.9	12394.3	15818.6	20188.8	25766.5	32885.1
AD VAL TAXES	0.0	0.0	0.0	0.0	0.0	0.0
INC TAX BASE	9833.4	12030.8	15455.1	19825.3	25403.0	32521.6
INCR TAXES	680.5	832.5	1069.5	1371.9	1757.9	2250.5

****

COMB. TOTAL CASH FLOW ($ X 1000)

****

PERIOD	1	5	10	15	20	25
DEVEL HOLD EXPC	-112.8	-110.3	-106.4	-101.4	-95.0	-86.8
INC.TAX EXPC	680.5	832.5	1069.5	1371.9	1757.9	2250.5
ANNUAL CASH FLOW	567.7	722.3	963.1	1270.6	1662.9	2163.7
ACCUMULATED CASH	567.7	3215.4	7525.8	13233.8	20725.4	30493.5

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	30493.	15718.	14014.	12566.	11329.	10268.

Wilshire & Western

STOP CONTEXT

The Wilshire and Western subway stop lies at the western end of the Wilshire Center commercial district, and was selected to illustrate Value Capture potential in a highly developed and active multi-use area. Transportation is a key problem element in the area, and subway construction, though expensive, is expected to draw high ridership and minimize disruption.

Whe Wilshire and Western stop, based on the 1974 Kaiser/DMJM plan, lies on a subway route extending from downtown LA west to Century City, Westwood, and Santa Monica. The area around the stop is basically a major strip development, ranging from 1 to 2 blocks in width, containing a great deal of mid to high rise office development, mixed with regional retail commercial facilities. A stable, older residential area surrounds the higher density development.

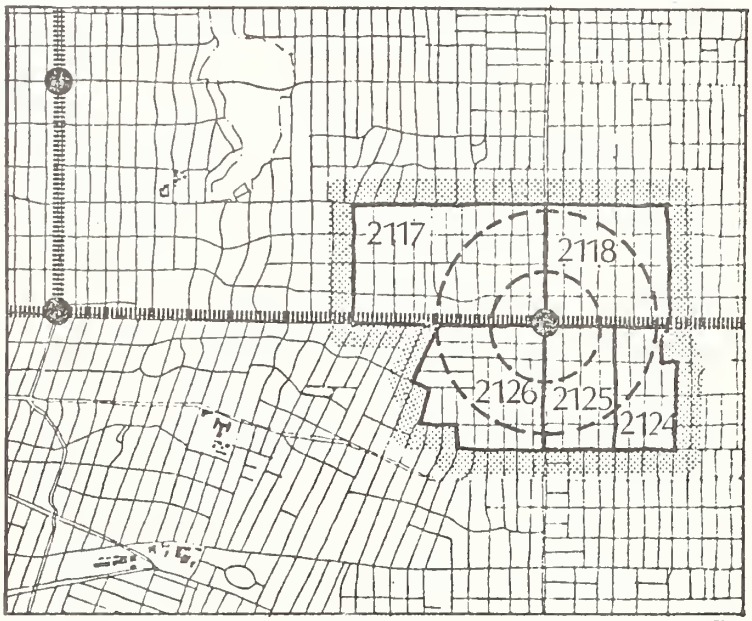
The stop is expected to be slightly more a destination than origin point. Very little or no kiss-and-ride or park-and-ride facilities are projected. Modal interchange is limited.

Environmental issues in the area are mostly the pollution associated with high levels of development. The local area is an almost completely man-made environment, so effects are mostly impacts on pollution levels, and possible upgrading of infrastructure elements.

The 19,204 people who occupy the 11,794 housing units of the Wilshire and Western area are almost exclusively low to moderate income, white, apartment dwellers. The area is extremely homogeneous, is all a part of one cluster, and shows almost no variation between tracts. There is a large portion of elderly (18-27%) and very few children. There is a Mexican-American minority of about 15 percent spread almost evenly across the area.

In terms of quality, the area scores well on unemployment, education, percent households in poverty, equality and overcrowding. It scores poorly on suicide rates, robberies, income and auto availability. None of the variations from the city mean, however, are large in either direction.

WILSHIRE BOULEVARD LOOKING EAST Fig. 5/21



WILSHIRE AND WESTERN STOP CONTEXT Fig. 5/22

WILSHIRE BOULEVARD LOOKING WEST Fig. 5/23

Between 1960 and 1970, the total population of the area declined slightly, as did the total housing units. The number of vacant units also increased, while most of the losses to the housing stock were owned units. Housing values and rents increased proportionately with the city mean, but remained relatively low.

Aside from residents of the area, businesses, business groups, retailers, employees and shoppers are expected to be major area interest groups. These specialized users of the area are expected to be numerically greater than residents, and more directly affected by transit related developments, but the area residents have a wider range of interests in the area.

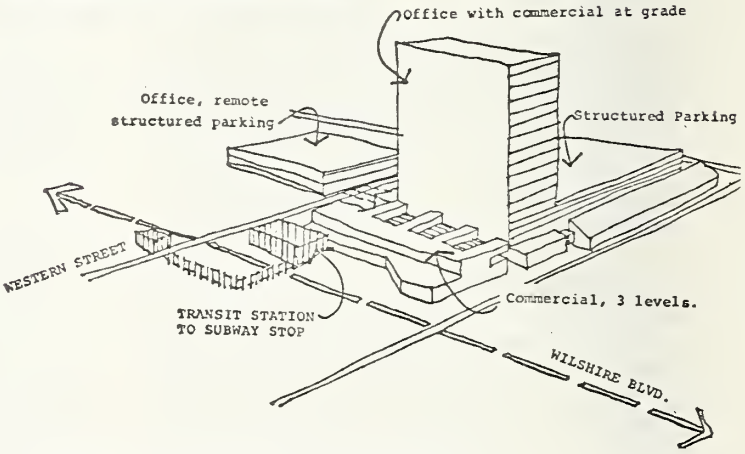
Potential for land value appreciation in the area is relatively good. The current market for office space is strong, and though prices are high and accessibility at present is good, increasing congestion is one of the major limits on future growth. The effect of transit development, then, may allow development and appreciation to continue, rather than tapering off in the future, thus creating value attributable to transit development.

In terms of specific markets, projections for office development indicate a net growth of around 5 million square feet of office space by 1990. Residential unit projections in 1970 forecast a net increase of around 33,000 housing units for the mid-Wilshire district, which includes 26 census tracts centered on Wilshire and Western. New construction is expected to be almost entirely in multi-family units, with a net decline in single family residences. Retail commercial markets are growing slowly, with an emphasis on office-related and highway related commercial facilities in the Wilshire Center area.

VALUE CAPTURE ALTERNATIVE #1

Alternative #1 presents a joint participation scenario for major redevelopment of a block facing on the Wilshire and Western intersection. Transit entity land acquisition is limited to 54,000 square feet facing directly on Wilshire which is required for the transit stop. The remaining 176,400 square feet is acquired by a private developer.

ALTERNATIVE #1 AERIAL VIEW Fig. 5/24



ALTERNATIVE #1 DEVELOPMENT COMPONENTS Fig. 5/25

The transit entity then joins with the private developer in project development, using control of the key frontage parcel as a contribution to the project in return for a 10% share of project revenues. Through participation, the transit entity also has significant input into urban design, program and architectural aspects of the project, which can help achieve community design goals.

The provision of mid-high-rise office space, and community commercial space oriented towards major streets and transit responds directly to major market forces in the area, and projected cash flow results are good. The illustrative program includes:

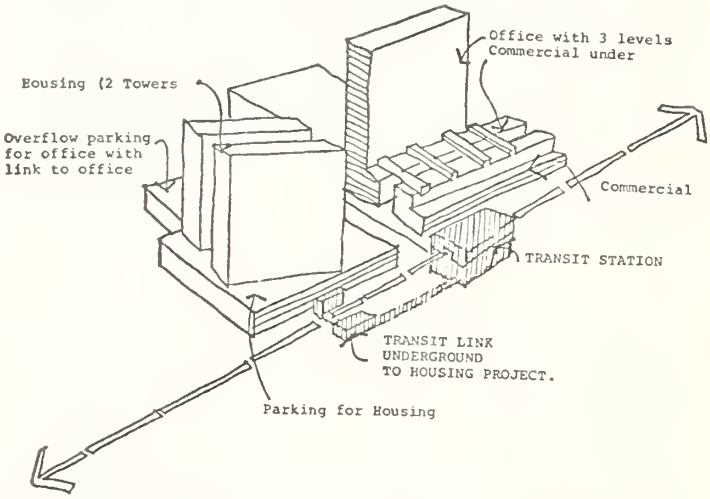
ALTERNATIVE #2 PLAN Fig. 5/27

	FACILITY			PARKING			TECHNIQUE
	Type	Square feet	Stories	Spaces	Type	Square Feet	
Ⓣ	Transit Stop	12,000	2	-	-	-	Joint Development
⊙	Mid-High Rise Office	500,000	25	2,000	Struct.	700,000	Joint Development
	Community Commercial	144,000	3	620	Struct.	217,000	Joint Development

ALTERNATIVE #1 PLAN Fig. 5/26

VALUE CAPTURE ALTERNATIVE #2

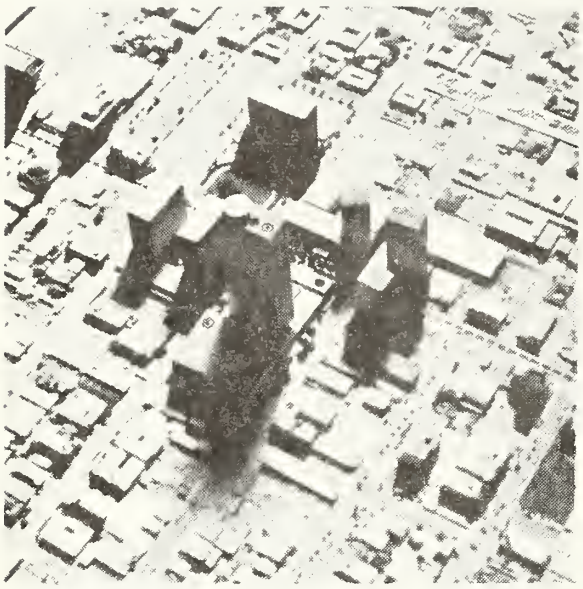
The second study at Wilshire and Western proposed the same overall facility program as option #1, but applied different Value Capture techniques. In option 2, 124,500 square feet of land are acquired for the transit stop and 355 parking spaces. The remainder of the block is uncontrolled, and is assumed to be developed by private interests.



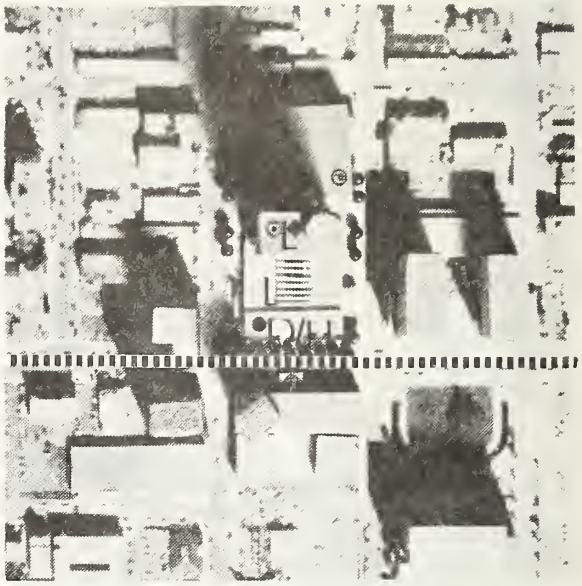
ALTERNATIVE #2 DEVELOPMENT COMPONENTS Fig. 5/28

To recapture value, the transit or development entity develops and holds the transit stop and related parking; leases air rights above parking for development of community commercial space; and develops an incremental value tax district which is illustrated for cash flow purposes to include only the rest of the block on which the stop is developed. Considerable justification exists, in practice, for a considerably larger tax district generating higher revenues. The illustrative program includes:

	FACILITY			PARKING			TECHNIQUE
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
Ⓣ	Transit Stop	12,000	2	-	-	-	Develop/Hold
⊙	Mid-High Rise Office	500,000	25	2,265	Struct.	792,750	Tax
	Community Commercial	144,000	3	355	Struct.	124,250	Land Lease, Tax



ALTERNATIVE #3 AERIAL VIEW Fig. 5/29



ALTERNATIVE #3 PLAN Fig. 5/30

VALUE CAPTURE ALTERNATIVE #3

Value Capture Alternative #3 presents a slightly larger overall facility program, with an aggressive land acquisition policy and minimal development by the transit or development entity. The transit or development entity is considered to acquire the entire block bounded by Wilshire, Western, Oxford and 6th streets for the transit stop and related parking, using supplemental condemnation if it is required and permissible.

The transit entity then develops the transit stop, and leases the remaining parcel with the provision that developers provide design guidelines. Revenue community enhancement guidelines. Revenue is realized by the transit entity through its own operations, and lease incomes.

The illustrative program includes:

	FACILITY			PARKING			TECHNIQUE
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
Ⓣ	Transit Stop	9,000	1-2	-	-	-	Develop/Hold
	Regional Commercial	290,000	3	1,100	Struct.	385,000	Land/Lease
⊙	High-Rise Office	500,000	25	2,000	Struct.	700,000	Land Lease
	High-Rise Apartments	300,000	15	450	Struct.	157,500	Land Lease
	Neighborhood Commercial	7,800	1	-	-	-	had/A.R. Lease

IMPACTS ON THE COMMUNITY

Wilshire and Western development is expected to have a wide variety of effects on numerous interest groups and constituencies, and at the same time, there are some significant differences between alternatives. In terms of social parameters, for example, employment is provided in all three schemes, benefitting both local residents and more distant communities. Alternative #3, however, provides new high-rise, high income housing which will affect the whole series of indicators. Some increase in local activity patterns is likely, but should not change basic existing patterns of use. Some new service needs may be generated by new residents in alternative #3.

Local noise and air pollution may be increased due to auto traffic related to the 2,620-3,550 new parking spaces, but this may be offset to some degree by increased transit utilization, i.e., the new facilities will generate less new traffic immediately adjacent to the stop than if they were located 10 blocks away. New open space and pedestrian access along Wilshire may improve amenity, but building height effects on sunlight and wind may be negative. Congestion or overloading of sidewalks, streets or utility systems may be a problem.

Mobility to the area is already good, but subject to increasing congestion. The subway itself should be important in maintaining good access, and improving transit time. The degree to which stop-related development is probably limited by the current supply of related facilities and the high convenience of the stop. Modal transfer facilities are not provided except limited bus/transit transfer.

Transit development should make the Wilshire corridor more attractive as an office and commercial center, providing a net gain for the corridor as a whole but possible redistribution from other areas of the city. Other affects such as pollution, employment, and housing are similar with a net-gain or loss within the stop and corridor, but redistribution of resources when considered city-wide. Benefits from public involvement in development may include concentration near the stop, co-ordination of development, provision of housing in option 3, and provision of pedestrian environments and open space.

Short range relocation and construction impacts may cause congestion and hazards, but are limited in geographic scope. Pollution, commercial and office availability and employment, public amenities, and transit shifts should take on increasing long range importance.

In terms of overall evaluation, results are mixed. All groups suffer from congestion, but benefit from convenience of commercial facilities, transit and public amenities. Residents in addition have new housing options in alternative #3.

Businesses will be hurt by short range impacts, but may receive a boost from agglomeration and accessibility in the long run. Visitors and shoppers have more concentrated facilities and convenience, but again are affected by pollution and congestion. By and large, it seems that financial considerations will be predominant, both in selecting techniques for Value Capture, and in assessing results.

		AREA MEAN	CITY MEAN	CHANGE DUE TO VCP		
				ALT#1	ALT#2	ALT#3
PRIMARY INDICATORS	% Labor Force Unemployed	4.9	7.0	L/B	L/B	L/B
	% Population, 25 or over High School Graduates	72.6	62.0	O	O	H/B
	% Households in Poverty	12.5	14.0	L/B	L/B	L/B
	% of Tract with Air Pollution Problems	-	-	H/W	H/W	H/W
	Median Family Income	6215	7511	H/B	H/B	HH/BB
	Rent as % of Income: $5,000-$9,999 Income	22.3	20.8	O	O	H/W
	% of Units with 1.01 Persons per Room or More	3.6	8.37	O	O	O
SECONDARY INDICATORS	% of Tract with Water Pollution Problems	-	-	O	O	O
	% of Tract with Noise Pollution Problems	-	-	H/W	H/W	H/W
	% of Tract without Pollution	-	-	L/W	L/W	L/W
	% of Households with no Auto	34.1	19.2	O	O	O
	Median School Years Completed, 1970	12.7	12.4	O	O	H/B

NOTE: Numerical increase in some indicators denotes improvement, in other cases it indicates worsening of the current status. All indicators are referenced to the immediate stop context.

KEY:
- HH - significantly higher indicator value
- H - somewhat higher
- O - no change
- L - somewhat lower
- LL - significantly lower
- BB - significant improvement
- B - some improvement
- O - no change
- W - somewhat worse
- WW - significantly worse

COMMUNITY QUALITY INDICATORS Fig. 5/31

FINANCIAL INVESTMENT ANALYSIS -
VALUE CAPTURE ALTERNATIVE #1

```
********************
JCINT DEVL WLSHR1
DATA FOR THIS PART
********************

DEVEL.USES          4
NO.OF YEARS        25
NO.OF PARTNR        2
YEAR OF SALE       30

% VACANCY         5.00
CAP. RATE        9.60
MORT:VAL.RTO    80.00
MTG.TERM        25.00
% L.T. INTRS     9.00
% RECAP@SALE   100.00
% COMMISSION      5.00
$EQUITY PAID 8000.00
LANDCOS.$/SF    18.50
KSF PAR.SIZE   230.40
$ DEMOL.COST    61.00

FOR EACH PARTNER:

PARTNER NO.         1
% SHARE         10.00
% INCOME TAX      0.00
% CAP.GAINS       0.00

PARTNER NO.         2
% SHARE         90.00
% INCOME TAX     50.00
% CAP.GAINS      50.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI   12000.
MIC/HIGH RIS  500000.
COMMUNITY CC  144000.
STRUCTURED P  917000.
```

```
*************************************************************
JCINT DEVL WLSHR1     ---   INCOME ANALYSIS    ( $ X 1000 )
*************************************************************

PREV.EQUITY ASSUMED:      8000.   COMPUTED EQUITY:        11825.

TOTAL COST OF PROJ.:     51984.   COMPUTED MOR-VAL RTO.      80.00
```

PERIOD	1	5	10	15	20	25
OPER INCOME	4919.6	5979.8	7631.8	9740.3	12431.4	15865.8
FIRST-AMORT	474.1	669.3	1029.8	1584.5	2437.9	3749.6
INTRST	3614.4	3419.2	3058.7	2504.0	1650.6	337.5
DEPRECIATION	1750.3	1502.8	1243.0	1028.9	852.4	706.7
TAXABLE INC	-445.1	1057.7	3330.2	6207.4	9928.4	14821.7
TAX BENEFIT	-200.3	476.0	1498.6	2793.3	4467.8	6669.8
PRETAX C.F.	831.1	1891.2	3543.3	5651.8	8342.8	11777.3
C.F.AFT TAX	1031.4	1415.2	2044.7	2858.5	3875.0	5107.5
ROR (CASH)	7.028	15.994	29.966	47.797	70.555	99.601
ROR(CASH)						
PARTNER= 1	7.0	16.0	30.0	47.8	70.6	99.6
PARTNER= 2	7.0	16.0	30.0	47.8	70.6	99.6
INC.=F&C						
PARTNER= 1	492.0	598.0	763.2	974.0	1243.1	1586.6
PARTNER= 2	4427.6	5381.8	6866.7	8766.3	11188.2	14279.3

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 8.990 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 13.730 %

```
*************************************************************
COMB. TOTAL CASH FLOW ($ X 1000)
*************************************************************
```

PERIOD	1	5	10	15	20	25
JCINT DEVL WLSHR	83.1	189.1	354.3	565.2	834.3	1177.7
ANNUAL CASH FLOW	83.1	189.1	354.3	565.2	834.3	1177.7
ACCUMULATED CASH	83.1	674.1	2099.2	4482.9	8089.8	13258.1

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	13258.	6248.	5462.	4800.	4240.	3764.

FINANCIAL INVESTMENT ANALYSIS -
VALUE CAPTURE ALTERNATIVE #2

****

DEVEL HOLD WLSHR2
DATA FOR THIS PART
****

DEVEL.USES	2
NO.OF YEARS	25
NO.OF PARTNR	1
YEAR OF SALE	30
% VACANCY	0.00
CAP. RATE	9.80
MORT:VAL.RTO	100.00
MTG.TERM	25.00
% L.T. INTRS	6.00
% RECAP@SALE	100.00
% COMMISSION	5.00
$EQUITY PAID	0.00
LANDCOS.$/SF	18.50
KSF PAR.SIZE	124.50
$ DEMOL.COST	30.00

FOR EACH PARTNER:

PARTNER NO.	1
% SHARE	100.00
% INCOME TAX	0.00
% CAP.GAINS	0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI	12000.
STRUCTURED P	17750.

****

DEVEL HOLD WLSHR2 --- INCOME ANALYSIS ($ X 1000)

****

PREV.EQUITY ASSUMED: 0. COMPUTED EQUITY: 0.

TOTAL COST OF PROJ.: 3712. COMPUTED MOR-VAL RTO. 100.00

PERIOD	1	5	10	15	20	25
OPER INCOME	84.6	102.8	131.2	167.4	213.7	272.7
FIRST-AMORT	67.7	85.4	114.3	153.0	204.7	273.8
INTRST	222.7	204.9	176.1	137.4	85.7	16.4
DEPRECIATION	44.0	38.6	32.8	27.8	23.6	20.1
TAXABLE INC	-182.1	-140.7	-77.6	2.2	104.4	236.2
TAX BENEFIT	0.0	0.0	0.0	0.0	0.0	0.0
PRETAX C.F.	-205.8	-187.6	-159.2	-122.9	-76.7	-17.7
C.F.AFT TAX	-205.8	-187.6	-159.2	-122.9	-76.7	-17.7
ROR (CASH)	0.000	0.000	0.000	0.000	0.000	0.000
ROR(CASH) PARTNER- 1	0.0	0.0	0.0	0.0	0.0	0.0
INC.-F&C PARTNER- 1	84.6	102.8	131.2	167.4	213.7	272.7

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) - 2.030 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) - 3.760 %

****

AIR-LEASE WLS.2
DATA FOR THIS PART
****

DEVEL.USES	2
NO.OF YEARS	25
YEAR OF SALE	30
% VACANCY	10.00
CAP. RATE	9.80
% RECAP@SALE	2.00
% COMMISSION	5.00
% L.T. INTRS	9.00
LANDCOS.$/SF	0.00
KSF PAR.SIZE	144.00
$ DEMOL.COST	0.00

DEVELOPMENT PROGRAM:

COMMUNITY CC	144000.
STRUCTURED P	124250.

****

AIR-LEASE WLS.2 --- LAND LEASE/SALE ANAL.($ X 1000)

****

TOTAL COST OF PROJ.: 0. (INCL. ACQ.+ CLEAR. ONLY)

PERIOD	1	5	10	15	20	25
LEASE INCOME	410.4	410.4	523.8	668.5	853.3	1089.0
REV AT SALE	4188.1	4188.1	5345.2	6821.9	8706.7	11112.1
TOT TAXES	0.0	0.0	0.0	0.0	0.0	0.0
EXPN OF SALE	209.4	209.4	267.3	341.1	435.3	555.6
PROC AFT TAX	3978.7	3978.7	5077.9	6480.8	8271.3	10556.5

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) -NO-

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) -NO-

****

INC.TAX WLSFR2
DATA FOR THIS PART
****

DEVEL.USES	3
NO.OF YEARS	25
% VACANCY	5.00
CAP. RATE	9.80
LANDCOS.$/SF	18.50
KSF PAR.SIZE	105.90
% ASSES.RTO.	25.00
ADVAL.TAX RT	0.00
INC.TAX RATE	6.92
IMPR.VALUE $	500.00

DEVELOPMENT PROGRAM:
MID/HIGH RIS 500000.
COMMUNITY CC 144000.
STRUCTURED P 792750.

****

INC.TAX WLSFR2 --- TAXATION ANALYSIS ($ X 1000)

****

PERIOD	1	5	10	15	20	25
TAX BASE TOT	11295.4	13729.6	17522.8	22363.9	28542.6	36428.2
AD VAL TAXES	0.0	0.0	0.0	0.0	0.0	0.0
INC TAX BASE	10680.7	13114.9	16908.0	21749.1	27927.8	35813.4
INCR TAXES	739.1	907.5	1170.0	1505.0	1932.6	2478.3

****

COMB. TOTAL CASH FLOW ($ X 1000)

****

PERIOD	1	5	10	15	20	25
DEVEL HOLD WLSFR	-205.8	-187.6	-159.2	-122.9	-76.7	-17.7
AIR-LEASE WLS.	410.4	410.4	523.8	668.5	853.3	1089.0
INC.TAX WLSFR	739.1	907.5	1170.0	1505.0	1932.6	2478.3
ANNUAL CASH FLOW	943.7	1130.4	1534.7	2050.6	2709.2	3549.6
ACCUMULATED CASH	943.7	5174.0	12237.2	21711.7	34263.7	50743.4

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	50743.	26057.	23214.	20798.	18736.	16968.

FINANCIAL INVESTMENT ANALYSIS
VALUE CAPTURE ALTERNATIVE #3

```
********************
DEVEL HOLD WLSHR3
DATA FOR THIS PART
********************

DEVEL.USES          1
NO.OF YEARS        25
NO.OF PARTNR        1
YEAR OF SALE       30

% VACANCY        0.00
CAP. RATE       9.80
MORT:VAL.RTO  100.00
MTG.TERM       25.00
% L.T. INTRS    6.00
% RECAP@SALE  100.00
% COMMISSION    5.00
$EQUITY PAID    0.00
LANDCOS.$/SF   18.50
KSF PAR.SIZE    6.00
$ DEMOL.COST   10.00

FOR EACH PARTNER:

PARTNER NO.         1
% SHARE       100.00
% INCOME TAX     0.00
% CAP.GAINS      0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI   9000.
```

```
*****************************************************************
DEVEL HOLD WLSHR3    ---  INCOME ANALYSIS    ( $ X 1000 )
*****************************************************************

PREV.EQUITY ASSUMED:        0.  COMPUTED EQUITY:            0.
TOTAL COST OF PROJ.:      893.  COMPUTED MOR-VAL RTO.    100.00

PERIOD                    1       5      10      15      20      25

OPER INCOME             6.6     8.0    10.2    13.0    16.6    21.2

FIRST-AMORT            16.3    20.6    27.5    36.8    49.3    65.9
      INTRST           53.6    49.3    42.4    33.1    20.6     4.0

DEPRECIATION           23.2    20.5    17.6    15.1    13.0    11.2
TAXABLE INC           -70.2   -61.9   -45.8   -35.2   -17.0     6.1
TAX BENEFIT             0.0     0.0     0.0     0.0     0.0     0.0
PRETAX C.F.           -63.3   -61.9   -55.7   -56.9   -53.3   -48.7
C.F.AFT TAX           -63.3   -61.9   -55.7   -56.9   -53.3   -48.7

ROR (CASH)            0.000   0.000   0.000   0.000   0.000   0.000

ROR(CASH)
  PARTNER=     1      0.0     0.0     0.0     0.0     0.0     0.0

INC.-F&C
  PARTNER=     1      6.6     8.0    10.2    13.0    16.6    21.2

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10)   0.230 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25)   1.130 %
```

```
********************
AIR-LEASE  WLSHR3
DATA FOR THIS PART
********************

DEVEL.USES          5
NO.OF YEARS        25
YEAR OF SALE       25

% VACANCY        5.00
CAP. RATE       9.80
% RECAP@SALE    2.00
% COMMISSION    5.00
% L.T. INTRS    9.00

LANDCOS.$/SF   18.50
KSF PAR.SIZE  224.40
$ DEMOL.COST   51.00

DEVELOPMENT PROGRAM:

REGIONAL  CC 250000.
HIGH RISE OF 500000.
HIGH RISE AP 300000.
NEIGHBRHD CC   7800.
STRUCTURED P1242500.
```

```
*****************************************************************
AIR-LEASE  WLSHR3    --- LAND LEASE/SALE ANAL.($ X 1000)
*****************************************************************

TOTAL COST OF PROJ.:     4202.  (INCL. ACQ.+ CLEAR. ONLY)

PERIOD                    1       5      10      15      20      25

LEASE INCOME         2380.7  2380.7  3129.3  4084.6  5303.9  6860.1

REV AT SALE         27647.4 27647.4 35285.8 45034.4 57476.4 73355.8
TOT TAXES               0.0     0.0     0.0     0.0     0.0     0.0
EXPN OF SALE         1382.4  1382.4  1764.3  2251.7  2873.8  3667.8
PROC AFT TAX        26260.9 26265.1 33521.5 42782.7 54602.6 69688.0

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10)  70.120 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25)  67.020 %
```

****

COMB. TOTAL CASH FLOW ($ X 1000)

****

PERIOD	1	5	10	15	20	25
DEVEL HOLD WLSFR	-63.3	-61.9	-59.7	-56.9	-53.3	-48.7
AIR-LEASE WLSFR	2380.7	2380.7	3129.3	4084.6	5303.9	6860.1
ANNUAL CASH FLOW	2317.4	2318.8	3069.6	4027.8	5250.7	6811.4
ACCUMULATED CASH	2317.4	11590.4	26933.6	47066.5	73312.1	107359.4

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	107359.	55850.	49888.	44815.	40479.	36755.

Notes

1. Kaiser Engineers/Daniel, Mann, Johnson, and Mendenhall, SCRTD Plan Refinement, Los Angeles, Vol. I, March 21, 1974.

2. Los Angeles Times, November 23, 1975.

3. Research schedule precluded inclusion of more recent plan alternatives in initial assumptions made for example stop locations.

4. Kaiser Engineers, op. cit.

5. See Part 4 for financial data sources.

6. Land parcel price estimates were based on data from the Los Angeles Parcel Information System.

7. Southern California Rapid Transit District, Transit for Los Angeles County, A Subregional Transit Element of the Transportation Plan, Los Angeles, July, 1974.

8. Southern California Association of Governments, Southern California Regional Transit System Plan, Los Angeles, July 11, 1974.

9. Los Angeles Times, August 17, 1975.

10. Donald R. Hodgman, "Air Rights and Public Finance: Pulbic Use in a New Guise," 42 So. Cal. L. Rev. 625, at 649-50. Opinion #17-161-170-213, Oct. 2, 1967, City Attorney's of L.A.: Acquiring of real property (city) industrial development.

11. This maybe changing: A recent proposed revision to the law submitted to the California legislature by the Law Revision Committee would make the question of public necessity justifiable if these were alleged.

12. Oct. 2, 1967, op. cit.

13. 224 Cal. App. 2d 102.

14. Hodgman, op. cit.

15. Assembly Bill 11 to be codified as §§ 1230.010-1273.050, Cal. Code of Civil Procedure.

16. Ibid., Article 2.

17. Hodgman, op. cit.

18. 271 S.W. 2d 137 (1964); 190 N.E. 2d 402 (1963).

19. Letter from Norman L. Roberts, Deputy City Attorney for Los Angeles, dated September 26, 1975, at p. 3 & 4.

20. §§30631,

21. Cal. Code of Civil Procedure §1240.120.

22. City of Santa Barbara v. Cloer, 216 Cal. App. 2d 127, 131 (1963).

23. Streets and Highway Code §104.3.

24. See, A.B. 11, op. cit. Article 3.

25. Streets and Highway Code §104.6.

26. 436 P.2d 342 (1968).

27. Ibid., at 346.

28. Streets and Highway Code §104.15.

29. 279 P2d 529 (1955).

30. Assembly Bill 11, to be codified as §§1230.010-1273.050 Cal. Code of Civil Procedure, at Article 5.

31. Streets and Highway Code §104.

32. Deerings California Codes Annotated, Public Utilities §99000 et. seq.

33. Interview with Sen. James Mills, August 28, 1975 in Sacramento.

34. Preliminary Draft: Development Rights Transfer: An Application for Community Development In Areas To Be Served by Rapid Transit, by Jeff Carpenter, December 16, 1974, at p. 14.

35. Carpenter, op. cit., at pp. 14-15. Samuel A. Sperry, "Tax Allocation Bonds in California" Journal of the Urban Planning and Development Division, September, 1973, pp. 147-155.

36. Eugene Jacobs, "The California Tax Allocating Law" Tax Increment Financing of Urban Redevelopment Law, Procedures of a Conference held in Chicago, September 25, 1973.

37. Samuel A. Sperry, "Tax Allocation Bonds in California" Journal of the Urban Planning and Development Division, September, 1973, pp. 147-155.

38. Article 16, §16.

39. §§3345 et. seq.

40. See Samuel A. Sperry, "Tax Allocation Bonds in California," Journal of the Urban Planning and Development Division, September, 1973, pp. 147-155

41. See, letter from Norman L. Roberts, dated September 26, 1975, at p.8.

42. Memo from Richard T. Downs to Jack R. Gilstrap, General Manager, "Commissions, Lawyers, and Air Rights," December 23, 1974.

43. Streets and Highway Code, §104.12.

44. Chapter 10, Airspace Development.

45. Code, op. cit., §§146.5, 147 and 150.

46. Hodgman, "Air Rights and Public Finance: Public Use in a New Guise," op. cit.

47. §33445 and 33448 (County over 4,000,000).

48. See, Ch. 5, Div. 7 of the Cal. Gov. Code, §S6500 et. seq.

49. Dun and Bradstreet.

50. A Public Transit Improvement Program, Los Angeles, Southern California Rapid Transit District March, 1974.

51. In August 1973, the UMTA Act of 1964, was amended and the grant provisions were revised to provide a 20 percent local and 80 percent federal share.

52. A Public Transit Improvement Program, op. cit.

53. Southern California Rapid Transit District, A Rapid Transit Update.

54. Deerings California Codes Annotated, Public Utilities Code, §30800.

55. Deerings California Codes Annotated, Public Utilities Code, §308201.

56. Stone and Youngberg, Municipal Financing Consultants, Inc., Technical Report - Financial Analysis, Los Angeles, SCRTD, April, 1974.

57. Ibid.

58. Stone and Youngberg, Concepts of Benefit Zones, Improvement Districts, and Tax Increments to Finance Rapid Transit, Los Angeles, SCRTD, May 1974.

59. Ibid.

60. Jeff Carpenter, Preliminary Draft: Development Rights Transfer (DRT): An Application for Community Development in Areas to be Served by Rapid Transit, Los Angeles, SCRTD, December 16, 1974.

61. Deerings California Codes Annotated, Public Utilities Code, §9900, et. seq.

62. SCRTD ACT, §3000, et. seq.

63. Stone and Youngberg, Concepts of Benefit Zones, op. cit.

64. Ibid.

65. Ibid.

66. Ibid.

67. Stone and Youngberg, Technical Report.

68. Blyth, Eastman, and Dillon, Progress Report to the City of Los Angeles: Bunker Hill People Mover, December, 1973.

69. Moody's Municipal and Government Manual, 1974, p. 425-426.

70. Blyth, Eastman, op. cit.

71. Preliminary Draft: DRT, op. cit. at pp. 13-15.

72. Deerings California Codes Annotated, Public Utilities Code, §30361.

73. See Legal Section, Supplemental Condemnation.

74. Moody's Municipal and Government Manual.

75. Ibid.

76. Stone and Youngberg, Concepts, op. cit.

77. Ibid.

78. Deerings California Codes Annotated, Public Utilities Code, §30632.

79. System Segment Cost Estimates, SCRTD, dated August 1975. These are capital cost estimates only and are not inclusive of the cost of servicing debt incurred.

80. Unit costs for more recently proposed mass transit alignments were applied to alignments assumed for this research.

81. Land or air rights leases were assumed to be of step-up type.

82. Watts Redevelopment District.

Part 6 Louisville Case Study

6a Introduction

As an older, medium sized[1] urban area where construction of an extensive fixed guideway transit system seems questionable; Louisville provided an excellent opportunity for exploring Value Capture application. Why? Louisville is facing a situation similar to most of the 200+ cities which have achieved SMSA status as metropolitan areas. Recent aggressive upgrading of Louisville transit service by the newly formed Transit Authority of River City (TARC) as a part of an extensive 5 year improvement plan[2] provides evidence that Louisville will experience mass transit development of some sort in years to come.

A need exists for looking closer at more modest levels of public transportation system development and the role of Value Capture. There is little doubt, in the cases of Los Angeles and Chicago, that intense development has the potential of occurring in the context of transit stops; but conclusions in moderately sized urban settings such as Louisville are less obvious. Louisville, as a case study, provides an opportunity to investigate this type of urban setting.

With proposed highway improvements in several corridors of the city[3] now facing high levels of uncertainty about implementation, consideration of transit alternatives is a timely exercise. Is it possible that Value Capture when applied to various concepts of transit improvements such as park-and-ride express bus corridors, bus lanes, or light rail can open the door to such improvements in cities like Louisville?

ASSUMPTIONS

Fundamental to the study of Louisville is the question of whether substantial ridership can be provided to support more sophisticated transit system development. Past studies have mixed conclusions about the sufficiency of transit demand within several corridors of the city.

In Louisville, as in Los Angeles, the findings presented here represent a compilation of problems and opportunities associated with the application of Value Capture. These are based on conclusions drawn from discussions with numerous local representatives of legal, financial, development, and transportation planning thinking supported by analysis of example transit related development situations in the city.

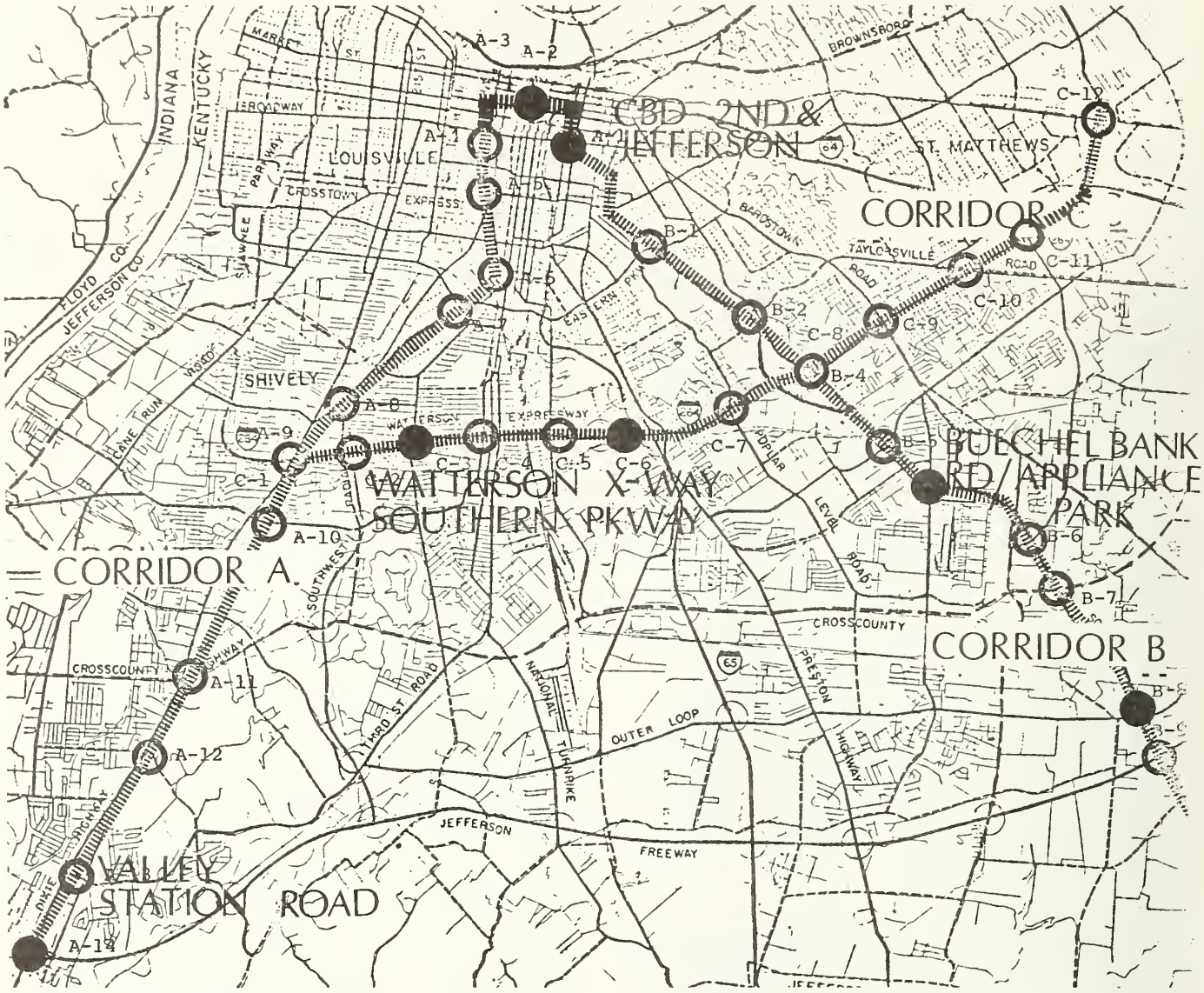
For the purposes of this work, it was concluded that earlier mass transit systems as proposed[4] were unsuitable because they did not reflect more recent priorities in transportation planning. This is not to say that they are unworkable or incorrect. Based on earlier proposals, hypothetical express bus lane plans for this research as shown in Figure 6/1 were developed.

This plan focussed on three corridors as either independent or interconnected transit routes. Corridor A follows the general route of the Southwest Radial Highway as proposed in the Comprehensive Plan[5] for Louisville's transportation in 1968. This along with the Southeast Radial, as traced by Corridor B, will provide freeway access to the central business district of Louisville from the southwestern and southeastern sections, respectively, of Jefferson County.

Transit development of some form will likely be considered for this corridor in the future.[6]

Corridor C assumes a bus-way within the right-of-way of the presently congested Watterson Expressway (I-264). The Watterson has been an influential element in Louisville's growth with major concentrations of office, commercial, and residential uses concentrating at its interchanges throughout its 18 mile length. Although some sections of this 4-lane roadway currently have volumes in excess of 120,000 vehicles per day, major plans for improving it have been met with strong opposition from those constituencies who express concern over the major relocation such plans would necessitate. Thus, again transit may be turned to as an alternative in improving the Watterson's problems. In any case, these corridors are hypothetical and are being utilized as a base upon which to evaluate Value Capture problems and opportunities. Although they have logical and historical merit, this case study will not technically resolve their legitimacy.

Specific stop situations selected in Louisville provide an array of development condi-



LOUISVILLE ASSUMED TRANSIT SYSTEM Fig. 6/1

tions. Two stops, Buechel Bank Road at Appliance Park and Valley Station, provide undeveloped or underdeveloped sites in suburban locations. Southern Parkway at the Watterson Expressway provides an older, stable residential setting; and finally an urban redevelopment opportunity is provided in the stop within Louisville's central business district.

The stop related development programs used in this work were based on evidence of market opportunities plus an interpretation of compatible development within each community setting. Financial investment analysis of these stops used locally adjusted data which was comparable with that used in the other case study cities. This allows for the reader to make general comparisons of investment alternatives not only between the stops in Louisville, but between stops in Los Angeles and Chicago as well.

OVERVIEW OF AGENCIES

While this research did not assume Value Capture application solely from the standpoint of existing transit authorities in each of the case study cities, it is useful to understanding the current administrative situation.

Transit operations in Louisville and Jefferson County were taken over by the public through the Transit Authority of River City in 1974. Since that time, through rapid improvement of hardware, numerous service modifications, and a good bit of publicity, TARC has become a household word in the Louisville area. TARC was surprisingly successful at the polls in 1974 as voters approved a .5 mil occupational

tax increase throughout the city and county to support its five year improvement plan for transit in the area. Within a few weeks of this victory, TARC's application for UMTA Section 5 funds was approved in Washington leaving TARC's near future bright indeed. By the end of the fiscal year 1974-1975, TARC's ridership had increased by nearly 11% marking the second year of reversal of a thirteen year decline of bus ridership.[7] Also, it was announced at that time that TARC had finished the year with nearly $2 million in surplus funds which would allow them to pay back earlier commitments from the City of Louisville and the Jefferson County Government as well as underwrite future service improvements, among which are several express routes.

In the summer of 1975 TARC opened its central business district circulator mini-bus system, LARC, and it, too, seems to be experiencing success as numerous supporters push for expansion of services.[8]

TARC's staff is oriented towards operations for the most part. Some duties such as short and long range planning are the responsibility of other agencies, primarily the Transportation Division of the Kentucky and Indiana Planning and Development Agency (KIPDA) along with a multi-agency planning coordinating committee which includes the City of Louisville and Jefferson County Governments.

The findings and conclusions herein presented were based in part on interviews with the following local representatives:

City of Louisville:
Hon. Dr. Harvey I. Sloan, Mayor
Mr. Allen Bryan, Executive Assistant to the Mayor for Community Development
Mr. Bert Deustch, City Law Department Director
Mr. Carl Fust, City Attorney
Mr. James Elliot, Director of Economic Development
Mr. Winston King, Counsel, Community Development Cabinet
Mr. Charles Burton, Community Development Cabinet
Mr. Charles Hasset, Deputy Director, Department of Building and Housing
Mr. Charles G. Bartman, Omnibudsman, Neighborhood Development Office

County of Jefferson, Kentucky:
Hon. Louis J. Hollenbach, III, Jefferson County Judge
Mr. Rick Northern, Director, Program Planning and Development Office
Mr. Larry Zielke, Special Legal Counsel to the County Judge
Mr. Fred Davis, Administrative Assistant to the Special Legal Counsel
Mr. E.R. Moberly, Assistant Administrator, Property Valuation Administration

Kentucky-Indiana Regional Planning and Development Agency, Inc.:
Mr. Neil Farris, Executive Director
Ms. Sarah Creed, Administrative Assistant to the Director
Mr. Richard Shogren, Director, Transportation Planning Division
Mr. Larry Anderson, Transit Planner
Mr. William B. Hayes, Jr., Transportation Planner
Ms. Heidi Fulkerson, Transportation Planner

Transit Authority of River City:
Mr. Albert Meinze, General Manager
Mr. David Gittleman, Legal Counsel
Mr. Roger Harker, Comptroller
Mr. Bobby Griffen, Operations Director
Mr. Bernard T. Wisenall, Transit Planner

Louisville and Jefferson County Planning Commission:
Mr. Donald J. Ridings, Executive Director
Mr. David Mansen, Deputy Director
Mr. David Ripple, Transportation Planner
Mr. Mike Lambert, Advance Planner
Ms. Lindsay A. Kruger, Economist
Mr. Robert Cox, Neighborhood Planner
Mr. Darrell Cozen, Advance Planner

Center City Commission:
Mr. Wilson Wyatt, Jr., Executive Director
Mr. Vippen Hoon, Urban Planner

Other Financial, Legal, and Urban Planning Resources:
Mr. A. Stephens Miles, President, First National Bank of Louisville
Mr. Thomas M. Kron, Real Estate Consultant (LeRoy Highbaugh Interests)
Mr. George Khol, Winman Interests, Cleveland, Ohio
Mr. E.T. Kirk, Merrill, Lynch, Pierce, Fenner and Smith, Inc., Louisville
Mr. George Partlow, J.J.B. Hillard and Lyons
Mr. Joe Ferguson, former Assistant Kentucky Attorney-General for Highways
Mr. Spencer Harper
Mr. John W. Moore, Jr., Open Space Coordinator, City of Louisville Riverfront Corporation
Col. Robert H. Allan, Executive Director and General Manager, Louisville and Jefferson County Riverport Authority
Mr. Stan Bowling, Director of Industrial Development, Louisville Chamber of Commerce
Mr. John Brounfield, Louisville Chamber of Commerce
Mr. Douglas J. Nunn, Director, Urban Studies Center, University of Louisville
Mr. Paul J. Schulte, Director, Community Analysis Division, Urban Studies Center

6b Legal

While there is ample reason to be cautious about Value Capture in Kentucky, there appears to be enough law to support it in all four of the broad categories with which the legal element of this research deals, given:

1. More explicit statutory authority;

2. Judicial willingness to approve new methods of financing.

Thus, one can be cautiously optimistic about Louisville, largely due to the apparent willingness of the legislature to innovatively respond to the needs of the market, and the resulting laws relating to public purpose and eminent domain.

GOVERNMENTAL STRUCTURE

It is worth noting that Louisville is a home rule community by virtue of a recently passed statute providing for home rule for all cities of the first class (Louisville is the only one) and the second class (of which there are apparently seven in the State). The statute has not yet been construed by the courts, but Louisville has been operating under the assumption it can do anything which the legislature could authorize it to do and which is not expressly prohibited by the state constitution.[9] There is a body of opinion in the municipal attorney's office that most of the concepts with which we have been dealing with respect to Value Capture could result in Value Capture implementation if the city passed the appropriate ordinances, probably without any additional enabling legislation from the state.

SUPPLEMENTAL CONDEMNATION

It would appear that some form of supplemental or excess condemnation would be feasible in the Louisville area. There are several statutory references to particular agencies and instrumentalities of government having fairly broad statutory authority to acquire property beyond what is immediately needed for the specific purpose for which the agency was created. However, few of these statutes have been construed by the Court of Appeal, the court of last resort in Kentucky, according to bond counsel and municipal attorneys in Louisville.

Public Use

Kentucky appears to follow the more liberal rule that as long as a public purpose is served by the exercise of the power of eminent domain, the exercise thereof runs little constitutional risk. The courts in Kentucky have moreover held recently that Kentucky urban renewal statutes authorizing not only condemnation but also the sale or lease of such publicly-acquired land to private parties for development and renewal, to be within the constitutionally-protected public purpose.[10] There is moreover, the statutory definition in K.R.S. Ch. 58.010:[11]

> *"Public project" means any lands, buildings or structures, works or facilities...suitable for an intended for use for the purpose of creating or increasing the public recreational, cultural and related business facilities of a community, including such structures as concert halls, museums, stadiums, theaters and other public facilities, together with related and appurtenant parking garages, offices and office buildings for rental in whole or in part to private tenants, dwelling units and apartment buildings for rental in whole or in part to private tenants, commercial and retail businesses, stores or other establishments, and any structure or structures or combination of the foregoing, or other structures having as their primary purpose the creation, improvement, revitalization, renewal or modernization of a central business or shopping community, and shall also include existing lands, buildings, structures, works and facilities, as well as improvements or additions to any such lands, building, structures, works or facilities.*

While the necessity for a taking generally is said to lie within the discretion of the legislature, the questions of whether it is for a public use is still, however, a matter for judicial scrutiny, at least according to one author. The distinction is often blurred, however. For a discussion of eminent domain in Kentucky generally, see Eminent Domain in Kentucky, Research Report No. 101, prepared for the Legislative Research Commission by Edith C. Schwab, July 1973.

It therefore seems reasonable to assume that the major impediment, if any, for supplemental condemnation generally, in Kentucky, with respect to public purpose, will be the existence, or lack of it, of appropriate statutory language by whichever statute the condemning authority exercises its power of eminent domain.

Supplemental Condemnation Essential to the Successful Operation of the Entity

It was noted in the previous Value Capture report that, although often most difficult to justify, this theory of supplemental condem-

nation offers the greatest opportunity for value recapture.[12] It was also cited several recent cases from various jurisdictions around the county which appeared to support such a theory: when it is established that the purposes for which the land is acquired are reasonably essential to the successful operation of the district or entity.[13] The trick is to avoid the pitfall of sheer, unadulterated land dealing which characterized the anti-recoupment decision in Cincinnati v. Vestor, which was affirmed by the U.S. Supreme Court.[14]

In Kentucky, a form of such supplemental condemnation is clearly permitted by statute as for "ancillary purposes" which, as long as not the sole purpose for exercising the power of eminent domain, is a permissable purpose, provided it is so set out in an enabling statute.[15]

It appears to be so set out in two categories of places.

First of all, general condemnation enabling statute to which a number of agency statutes refer for their eminent domain powers by reference,[16] states:[17]

> *"Public project" means any lands, buildings, or structures, works or facilities (a) suitable for and intended for use in the promotion of the public health, public welfare or the conservation of natural resources, including the planning of any such lands, buildings, structures, works or facilities; or (b) suitable for and intended for use for the purpose of creating or increasing the public recreational, cultural and related business facilities of a community including such structures as concert halls, museums, stadiums, theaters and other public facilities, together with related and appurtenant parking garages, offices and office buildings for rental in whole or in part to private tenants, dwelling units and apartment buildings for rental in whole or in part to private tenants, commercial and retail businesses, stores or other establishments, and any structure or structures or combination of the foregoing, or other structures having as their primary purpose the creation, improvement, revitalization, renewal or modernization of a central business or shopping community, and shall also include existing lands, buildings, structures, works and facilities, as well as improvements or additions to any such lands, buildings, structures, works or facilities.*

It thus appears that for a range of agencies, condemnation for ancillary purposes is permissable by statute.

Second, a number of specific agencies are empowered to exercise the power of eminent domain for a broad spectrum of purposes, many of which could be construed to pertain to the economic success of the district, entity, etc. Minimally, such statutes would be construed to authorize uses of land, once the land has been validly acquired, for the purpose of dealing with the private sector for mutual financial benefits.

A governmental agency acting to create a "capital plaza" or other public building complex is specifically authorized to condemn not only for lands, buildings and public works "suitable for and intended for use as public property" but also:[18]

> *"suitable for and intended for use for the purpose of creating or increasing the public recreational, cultural and related business facilities of a community including such structures as concert halls, museums, stadiums, theaters, and other public facilities together with related and appurtenant parking garages, offices and office buildings for rental in whole or in part to private tenants, commercial and retail business, stores or other establishments and any structure or structures or combination of the foregoing, or other structures having as their primary purpose the creation, improvement revitalization, renewal or modernization of a central business or shopping community, and shall also include existing lands, buildings, structures, works and facilities as well as improvements or additions to any such lands, buildings, structures, works or facilities." (Emphasis added.)*

It would be difficult to draft more comprehensive authority. Acting pursuant to this broad grant of authority together with other statutory powers,[19] the City of Lexington and Fayette County have created the Lexington Center Corporation in order to finance and develop a municipal convention center and sports facility. To cover more than a square block (10-1/2 acres adjacent to the central business district) in area, the center is to consist of a trade show and sports facilities complex containing a sports arena capable of seating 22,600 persons, connection-exhibition hall facilities of approximately 60,000 square feet, restoration of an opera house--and 70,000 square feet of commercial parking space together with adjacent surface parking for 2,000-plus cars. The whole of this project will be financed by tax-exempt bonds issued by the Lexington Center Corporation, in the amount of 37.4 million dollars.[20]

On the other hand, it is worth noting that the courts in Kentucky have held that agency revenues used in pursuance of its acquisition powers cannot be applied to the acquisition and operation of a public enterprise jointly with a private corporation.[21] Like a number of these statutes discussed here and below, there is not a lot of case law and the existence of statutory authority, while helpful, does not necessarily signal judicial acceptance in whole or, as here, in part.

As in Texas,[22] those authorities responsible for the creation and development of ports are also given broad power to condemn. In Kentucky, a Riverport Authority may by condemnation acquire facilities, but may also:[23]

> *"acquire and develop property, or rights therein, within the economic environs of the riverport or proposed riverport to attract directly or indirectly river oriented industry."*

In fact it may:[24]

> *"by contract, lease, purchase, option gift, condemnation or otherwise any real or personal property, or rights therein, necessary or suitable for establishing, developing, operating or expanding riverports, riverport facilities, water navigation facilities, including spoilage areas for the disposal of materials dredged from river bottoms in an effort to improve the navigability of rivers, and industrial parks or sites within the economic environs of the riverport or proposed riverport. The authority may erect, equip, operate and maintain on such property buildings and equipment necessary and proper for riverport and water navigation facilities. The authority may dispose of any real or personal property, or rights therein, which in the opinion of the authority is not needed for use as riverport or water navigation facilities, or use as industrial parks or sites. The authority may lease, sell, convey, or assign its interest in land owned, optioned, or otherwise held by it to any person for the purpose of constructing and/or operating any industrial or commercial facility or for the purpose of acting as the authority's agent or licensee in effectively carrying out any of its powers and duties."* (Emphasis added.)

Apparently the statute has not been challenged.[25]

Acting under this broad grant of authority, the Louisville and Jefferson County Riverport Authority after extensive investigation is on the verge of developing an industrial park on approximately 1,750 acres of land located southwest of the central business district on the east bank of the Ohio River. In the past few years, the Authority has put together approximately 52 parcels of land using eminent domain for the acquisition of only one of them.

In order to proceed with development, the Authority is seeking the rezoning of approximately 1,600 acres of the property to accommodate and permit the construction of river-oriented industry, public and private port facilities, ancillary industrial parks and a management center for the Authority itself. The property has been "floodproofed." Presently, the property is zoned residential and has been leased back to the original owners to continue their present uses. The authority contemplates a writ of lease and sale of this huge "bank" of industrial property to private interests. Permitted uses are covered in an extensive Master Plan.[26]

The exercise of eminent domain powers for an avowed public purpose and the subsequent leasing thereof to private enterprise occurs in limited fashion in Kentucky in the area of highway construction and development. It appears that condemnation even for such facilities as service stations and similar concessions, although privately-operated, would be legal along turnpikes where the user is "captive" and has need of them. On highways where access is not so limited, it may be that "excess" land could be temporarily leased to a private party, but it is not clear that it would be possible to go much beyond that.

In this context, it is worth noting that Kentucky statutes permit the condemning of land and buildings for industrial purposes to be later turned over to private parties. The statute has never been used and there is substantial question as to its constitutionality in Kentucky.[27]

TARC is arguably empowered to engage in a wide range of activities, including the exercise of eminent domain powers:[28]

> *Such transit authority shall constitute an agency and instrumentality for accomplishing essential governmental functions of the public body or public bodies creating and establishing the same, and shall be a political subdivision and a public body corporate. An authority shall be authorized to promote and develop mass transportation in its general area, including acquisition, operation and extension of existing mass transit systems; and an authority shall have and may exercise other powers as may be necessary or desirable to carry out such purposes.*

At this time it looks like TARC can validly exercise its power of eminent domain for bus facilities. The use of such powers beyond this as of yet is still speculative.

Finally, it is worth noting that Louisville has successfully redeveloped substantial portions of its riverfront near the central business district. Several private projects are integrated with this development, including hotel and parking facilities. However, most was accomplished under urban renewal procedures and statutes, long an area onto itself in terms of mixing public and private development.[29]

Supplemental Condemnation for Future Use

Both in order to provide for the future in a business-like way and to permit temporary use of property so acquired for the future in a business-like manner, counties in other jurisdictions have approved instances of the acquisition of property for future use in advance of need. Related is the authority to dispose of such property--possibly at a tidy profit--if it turns out not to be needed for the public purpose for which originally required.

While one reference was not optimistic about such advance acquisitions, it appears that the State Fair Board is currently engaged in the acquisition of property for an as yet undetermined future use.

Once the property has been validly acquired--for whatever purpose--practice has been to authorizing disposition--though often after following public bidding requirements common in the disposition of "surplus" property--by statute. It is in any event reasonably clear that if the property is ever ceased to be so used, there is no reversion to the original owner.[30]

The same power exists with respect to the Riverport Authority as noted above.[31] It apparently exists also for the Louisville and Jefferson County Air Board.[32] The Board may acquire whatever it needs to establish an airport, of course.[33] Under its broad grant of authority, the board has acquired property for future use as much as 10 years in the future, without challenge. It appears that airports are in a unique position to acquire "protective" strips as well, as so-called "clear zones" for the take-off and landing of aircraft. This latter is unlikely to give much comfort to rapid transit systems.[34]

It has not been possible to uncover substantial support for the so-called "protection" and "remnant" theories in support of supplemental condemnation, except as noted above, but have no reason to believe that they would be unacceptable.

MONETARY TRANSFERS/SPECIAL BENEFIT ASSESSMENT

There appears to be some support in Louisville for effecting Value Capture by means of special benefit assessment, although analogies to existing statutory authority for such assessment did not particularly excite local bond counsel's enthusiasm. On the other hand, like Los Angeles, Louisville has begun to experiment with another type of monetary transfer with possibilities for value recapture: tax increment financing. A case challenging that technique has been recently filed and its outcome should determine the legality of the technique.

Special Benefit Assessment

The technique of special benefit assessment is not without precedent in Louisville, thanks to the relatively recent construction of the Fourth Street Mall project. There is almost general agreement that the type of assessment procedure there used, which differs from the proposed California procedure in that concentric districts are not set out, would be legal in Kentucky.

In the Fourth Street Mall project adjacent commercial property owners were assessed a portion of the cost of constructing the mall, and non-adjacent owners could have been so assessed if an appropriate finding of benefit had been made by the Board of Aldermen. This particular method of assessment with respect to the mall was specifically authorized by statute which comprehensively describes both the procedure and the method of ascertaining such special benefits:[35]

> *(12) "Pedestrian mall benefit area" means and shall include all of the land (except such as is located in a public way) which the governing body of the city by ordinance determines will be benefited by a pedestrian mall project, including specifically all land abutting directly on both sides of such project, and said pedestrian mall benefit area, may, if such benefit be so determined, include all of the land in each square block one side of which abuts or fronts upon a pedestrian mall; provided that lands not directly abutting a project shall be assessed at a lesser ratio, as provided in KRS 93A.030.*
>
> * * * *
>
> *(1) The general assembly of the Commonwealth of Kentucky determines as a legislative finding of fact that the initiation, construction, installation and establishment of a pedestrian mall project pursuant*

to the authority contained in this chapter constitutes a direct, physical, material and substantial benefit to land fronting and abutting directly upon said pedestrian mall project; and may, directly, physically, materially and substantially benefit the land other than that land directly fronting and abutting upon the pedestrian mall project which is situated within every square block, a portion of which directly abuts a pedestrian mall project, if said benefit is so established and determined by the governing body of a city instituting such project. However, that land situated within such square blocks not directly fronting and abutting upon a pedestrian mall project, where benefited, is recognized to be directly, physically, materially and substantially benefited to a lesser degree than land directly fronting and abutting upon such pedestrian mall project.

(2) The governing body of a city instituting, installing, constructing and establishing a pedestrian mall project shall, based upon a careful study of the facts involved, determine the nature and scope of the area of land benefited by the pedestrian mall project. The governing body may, if benefit be determined to inure to land other than that fronting and abutting directly upon a pedestrian mall project, ordain and determine that such land other than land directly fronting and abutting upon the project is benefited by such project; provided, however, that in such event the benefited land other than that directly fronting and abutting upon the pedestrian mall project shall not be assessed to an extent greater than as hereinafter set forth.

(3) In the event the governing body shall determine that land directly fronting and abutting on a pedestrian mall project is the only land benefited by said project, such land shall be the only property included in the pedestrian mall benefit area, and shall be assessed the entire costs of the project, on the assessed value basis authorized by KRS Chapter 107, as hereinafter provided. In the event the governing body shall determine that the pedestrian mall project will benefit all properties situated within every square block abutting upon a pedestrian mall project, the pedestrian mall benefit area shall be divided into two special benefit assessment zones, to be identified as zone one benefited land and zone two benefited land. Zone one benefited land shall include all land fronting and abutting on the pedestrian mall project to the depth of each parcel of land which fronts on said pedestrian mall project; provided, however, that zone one benefited land shall be assessed only to a depth from the pedestrian mall project of 210 feet, it being determined as a legislative finding of fact that direct, physical, material, and substantial benefits of the nature resulting from abutting directly upon such project do not accrue to properties which are situated at a distance from the pedestrian mall project exceeding 210 feet. All of the remaining land situated within any square block fronting upon a pedestrian mall project shall be classified as zone two benefited land.

(4) In levying improvement benefit assessments against all benefited lands situated within the geographical boundaries of the pedestrian mall benefit area, as such area is defined by ordinance adopted by the governing body, in the event the governing body has determined that all property situated within every square block abutting upon a pedestrian mall project shall be benefited by the project, and that all such property shall consequently be classified as zone one benefited land and zone two benefited land, not less than eighty percent of the total amount of improvement benefit assessments levied in each year shall be levied against and collected from the owners of the land classified as zone one benefited land, and the remainder of the total amount of improvement benefit assessments levied in each year shall be levied against and collected from the owners of the land classified as zone two benefited land. All such assessments to be made on the assessed value basis. (Emphasis added.)

The legislative findings in terms of benefit and public purpose are clear:[36]

The general assembly of the Commonwealth of Kentucky finds as a fact that the preservation of downtown areas of cities is vital to the health, safety and material well-being of the citizens and inhabitants thereof, and that the construction and installation of pedestrian mall projects will contribute to the safe and effective movement of persons, and serve the public health, safety, convenience, enjoyment and general welfare. The governing body of a city, to protect and serve the public safety, convenience and welfare and the interests of the public in the safe and effective movement of persons, and to preserve and enhance the function, appear-

ance and economic viability of the central mercantile and business areas of such city, may initiate, construct, install and establish a pedestrian mall project in the manner herein provided, at the exclusive cost of the owners of land located in the pedestrian mall benefit area, which is benefited by a pedestrian mall project.

Bond counsel in Louisville feels that the mall situation could be distinguished from a special benefit assessment district created around a transit stop. The point is that such a technique used in connection with a transit stop would have a more difficult time meeting a strict benefits test. It was also suggested that the statute may have had a difficult time passing muster in the Kentucky courts, if it had been challenged especially with respect to the assessments on property not fronting the mall, since Kentucky apparently has a line of cases requiring such benefits to be "very direct."

Tax Increment Financing

Kentucky has enacted a tax increment financing statute, similar to the one in California, whereby a municipal corporation or other taxing entity may pledge up to 95% of the incremental revenue, for a period not to exceed 25 years, which arises by virtue of a publicly financed urban redevelopment project, to the urban redevelopment agency in order to pay back the funds so expended:[37]

It is hereby found and declared that public improvements, and publicly promoted private improvements, in any development area which result in the increase in the value of property located in the development area, serve a public purpose for each taxing district possessing the authority, directly or indirectly, to impose ad valorem taxes in said development area. The increment in revenues derived by each taxing district from the development area is found and declared to be one of the benefits derived by each taxing district from any urban renewal or redevelopment project, or local development authority project, undertaken in the development area.

In connection with the establishment of any development area, an agency may enter into contracts with one or more taxing districts for the release to the agency of increments expected to be derived by such taxing district as a result of the undertaking of a project, provided, however, that no such contract shall require the release of less than fifty percent (50%) of such increments, for a period of more than twenty-five (25) years beginning with the first day of the calendar year after the execution of any such release or contract of release by a taxing district. Any amount derived by the agency under the terms of such release shall be used solely and only for the purposes of the project and in the development area.

As with the number of the statutes pertaining to Value Capture in Kentucky, the Kentucky Court of Appeals has not yet had occasion to pass on its constitutionality. However, we may not have long to wait. In July of 1975 a case was filed[38] in the Kenton Circuit Court challenging the creation of the Covington Development Authority and its intent to undertake projects using tax incremental financing. Specifically, the complaint seeks resolution of the following points:[39]

(1) Was the Covington Development Authority legally and constitutionally established in view of the powers purported to be conferred on it to act in areas not necessarily blighted or deteriorated? (Emphasis added.)

(2) If the Authority was legally and constitutionally established, did it have the power to establish the Riverside Development Area "for historical and open spaces preservation purposes or for the development permitted by KRS 99.610 to 99.680?"

(3) If the Covington Development Authority was legally and constitutionally established, could individuals be appointed as members of the Board of Commissioners of the Authority who held other offices or employment in and for the City, the County and independent boards, including school boards?

(4) Could the Covington Development Authority legally and constitutionally contract with the City, the County, and the independent school board and other independent boards for the release to the Authority of so-called "incremental revenues" under the terms of KRS 99.750 to 99.770, inclusive, and is said statute constitutional? (Emphasis added.)

(5) Does the Covington Development Authority possess the power to condemn property within a development area for streets, parks, and other property to be directly used by the public, or for any other purpose?

Louisville and Lexington have intervened on the side of the defendants and some private parties have intervened on the side of the plaintiff. The case is imminently expected to be tried, but it will be some time before it reaches the courts on appeal.

AIR AND SUB-SURFACE RIGHTS

It is worth noting at the outset that Kentucky has a long history of dealing in sub-surface rights due to the heavy mining activities in the state. The representatives with whom we raised the question of dealing in sub-surface and air rights indicated that they had never heard of a public entity separating off (or any suit requiring such an entity to do so, as appears to be the case in Houston) air or sub-surface rights from the property rights condemned for a particular project needing surface rights only. In any event, there seemed to be uniform agreement that with proper statutory authorization there would be no more difficulty in dealing with sub-surface and air rights than with any other excess property acquired by a public agency if the property were determined to be unnecessary at some point. There does not seem to be a great deal of substantive law on the subject in Kentucky.

INTERLOCAL AGREEMENTS AND INTERGOVERNMENTAL COOPERATION

Kentucky has an Interlocal Cooperation Act expressly permitting local government units to combine to do things which they are in any event unable to do on their own. It is unlikely, at least according to one expert in the field, that such a consortium could do more than each could do individually but at least such cooperation is not prohibited and, in fact, has taken place recently in the state.[40] The statute has never been challenged.

With respect to transit authorities, public agencies are expressly authorized to enter into joint agreement by statute, though it is not altogether clear what additional authority is granted to public agencies by reason of such statute, in terms of extra funding sources, etc.:[41]

> *(1) In addition to all other powers and rights granted by KRS Chapter 96A, public bodies are expressly authorized and empowered to enter into joint agreements and multi-municipal compacts with transit authorities, and all other units of government, both federal and state, for the acquisition, maintenance and operation of mass transportation facilities. Any such agreements may provide for proportionate payments by such public bodies for transit purposes based upon any reasonable criteria, including, but not by way of limitation, population and actual mass transit services rendered.*
>
> *(2) Any such joint agreement of multi-municipal compact may provide by its terms that notwithstanding the fact that a mass transportation program, together with the source of funding therefore, has been approved by the electorate or electorates of one or more of such public bodies, any such public body may, in any annual period, in lieu of utilizing such source of funding as approved by the electorate of any such public body, use and apply for purposes of making payments or contributions under such joint agreement or multi-municipal compact any other funds of such public body legally available therefore. Provided, however, that any source of funding approved by the electroate in connection with the approval of such a mass transportation program shall not, as a result of such permissive funding by any such public body from other legally availalbe sources, be rendered void or nugatory.*

6c Financial

Recapping the recent events of mass transit development in Louisville, one can be safe in saying that the pace has been fast and more improvements are clearly on the horizon. To these ends, is a relevant question, and, thus, so is Value Capture. While the legal element approaches this context with some caution, financially Louisville can be approached as a fortuitous situation, with a definite local desire to support mass transit and to seek to keep it a local activity vis-a-vis external sources of financing. In this respect, Louisville and Kentucky in general outside the transportation field, have made great use of urban renewal and local development financing. They also have legislated authorization for tax increment financing, have used industrial revenue bonds, and various real property Value Capture techniques coupled with bonded indebtedness. To finance mass transportation operations, Kentucky has legislated several taxation mechanisms, including ad valorem property and occupational taxes. In general, this evidence supports an optimistic financial setting for Value Capture in Louisville.

THE FINANCIAL ARENA

General agreement among several local economists is that as long as accessibility by automobile is as easy and cheap as it is, transit has little chance in returning to its place of past prominence when 88 million passengers a year used it compared to about 13 million recent users before the initiation of TARC.[42] Farebox revenues alone, long ago stopped supporting transit. Thus results the need to meet these operating deficits along with supporting TARC's five year improvement program to boost patronage through system upgrading, express bus service, and lower fares.

According to TARC's comptroller, TARC's position in Louisville is deemed a fortuitous situation compared to other transit entities, because a newly authorized occupational tax should fund deficit operations and provide needed local matching funds for UMTA grants. In June of 1974, TARC's board adopted a total working budget of $17,422,338 of which $8,796,078 was an UMTA capital improvement grant to provide initial financing for their proposed five-year mass transit improvement plan. The remainder of the budget was provided by the City of Louisville ($3,348,150), Jefferson County ($1,107,545), and $4,170,635 projected operating revenues.[43] These revenues, according to the comptroller, are derived from TARC's current intended plan to reduce fares as a marketing strategy to increase ridership and, hopefully, gain revenues on the margin. It is also hoped that federal grants could relieve the occupational tax burden at some point. Currently, there is appropriated out of the tax supported Mass Transit Fund, administered by the Fiscal Court, for the fiscal year ending June 30, 1976, the sum of $4,024,830 to TARC for the operation, maintenance, support, and functioning of Mass Transit Service in Louisville.[44]

In general, Value Capture in combination with ongoing financing plans in Louisville potentially offers a broad array of opportunities to finance future local shares for capital grants, to alleviate the occupational tax burden, to support deficit operations or other alternatives deemed worthy by local officials and the community.

THE FINANCIAL FINDINGS OF VALUE CAPTURE TECHNIQUES

This section discusses and presents the financial aspects of various Value Capture techniques. This focus addresses specifically the tripartite functions of finance as introduced in Part 3. These techniques are first treated and discussed in the context of being investment decisions, as an action to realize income from the input of resources. Second, the issue of financing some of these techniques is considered. Third, an evaluation of the earnings stream, as a function of the financial decision, is presented.

The major inputs to these financial aspects and returns are the legal mechanisms to acquire, control, and manage transit-related land parcels. As such, attention is redirected to the discussions in the previous section. Also important to Value Capture in Louisville is the aspect of zoning. This power can be at once a strong force for any real property Value Capture technique and also a strong detriment. The point is that zoning has the ability to control land uses, their aggregation, and thus, the ability to realize income.

Comprehensive land-use planning in historical terms has typically located commercial installations and high intensity uses at major, high intensity access points to movement systems. In Louisville, according to local representatives, it is considered difficult (and costly) to change existing zoning, for instance residential areas, to higher density uses.

In the area of special district zoning or the concept of creating a special district for land use development around a transit stop; it should be noted that while spot zoning is not permitted, special districts do have some precedent. The best example is a neighborhood commercial district providing for development of commercial related uses to serve an existing residential neighborhood. A district like this would provide for conditional uses and probably take the form of strip commercial development.

There seemed to be some disagreement about the extent to which various Value Capture techniques would disturb the private market and business community. Some experts felt that monopolistic character of a transit development entity (with the ability to deliver people and lower borrowing costs) might prove to be formidable competition for the private sector. However, others believed that the public purpose orientation of the transit entity coupled with lower borrowing costs would position them in the market place developing real estate that the private sector would have to, in all reasonableness, pass over for higher returns in other types of development.

It was expressed that the primary concern of a transit entity is people delivery and their position in the development community might pose a threat to the private sector's inter-

ests and responsibilities. The reason for this concern is based on the extent and magnitude of the transit entity dealing in property assemblage and development. To this end, as long as the transit entity engages in real estate within the purpose of developing a reasonable and feasible transit system for people delivery, it was felt that the business community would not feel usurped. In fact, it was believed that the business community would go a long way to support transportation improvements and seek to keep it a local activity.

AD VALOREM PROPERTY TAXATION

The application of ad valorem taxation in Kentucky represents a viable means to implement Value Capture. House Bill 679, passed in March 1974, permits a transit entity, to receive financial assistance through the creation of a special taxing district and use of an ad valorem tax, an occupational tax, or a sticker tax on motor vehicles (a license plate fee).[45] All of these forms of taxation are subject to voter approval. Under this law, voters approved the tax on all wages and salaries, and net profits of corporations with the exclusion of financial institutions, as a means to support the operation of the Transit Authority of River City (TARC).

According to one representative, the occupational tax is typically well accepted in Louisville, establishing a broader benefit base to support mass transt. The ad valorem tax was considered to finance new areas (mass transit) of city government and economic development. However, an increase in the tax levy was considered unfair for old established businesses to pay as well as posing a threat to increased economic growth of the area.

At present, the city's property tax rate is frozen at 59.1 cents per $100 of assessed valuation by the State Legislature. The County property tax is presently set at 19.8 cents per $100 assessed valuation, a limit also affected by State legislation.[46] Assessments in Kentucky are to be at 100% of fair market value, although recent sales assessment ratios approximate about 89% in Jefferson County. Updating is annual, but not entirely efficient. As mentioned earlier, this is a prerequisite to insure the maximum amount captureable by any taxation technique.

The application of this Value Capture technique requires not only an increase in the basic property tax rates of the city and county, necessitating changes in KRS 132.07 and KRS 68.245 which prohibit increases in the tax rate, but also voter approval. In Louisville and Jefferson County, property taxes are presently low by comparison to other areas, and thus, they could be a very unpopular tax to increase.

It is interesting to note one planner's opinion that the low ad valorem tax in the Louisville area may allow for greater speculation and manipulation in land uses and values. This is noteworthy for Value Capture and could, presumably, affect the application of other techniques; <u>if</u> higher taxes become capitalized into land values with a market unable or unwilling to support the necessary rents and costs of development.

Finally, one official of TARC noted that it could expect to derive financial assistance from the occupational tax now used or ad valorem taxation, but TARC would not employ a combination of <u>both</u> types of taxes in financing its operations.

Special Benefits Assessments Taxation

The use of special benefit assessment taxation is not without precedent in Louisville. The degree to which existing precedent is analogous to mass transit has been presented in section 6b. In financial terms, similar problems of poor understanding and investor confidence could occur in the financing of construction of a mass transit system or appurtenant facilities using this technique.

Specifically authorized by statute,[47] the procedure for special benefits taxation is to assess abutting property owners and non-adjacent property owners the entire construction costs of the facility on the assessed value basis authorized by KRS Chapter 107. These special benefit tax levies are applied to the retirement of the bond issue used to construct the improvements which provide the benefits. The special assessment bonds used are a tax bond, where the benefited property owners are assessed a percentage for the improvements. The assessments must be of sufficient magnitude to meet debt service and retirement requirements of the bond issue.

Special assessment bonds were used for the Louisville's Fourth Street Mall project, pursuant to the development plan of the Center City Commission.[48] These bonds were issued in the amount of $1,200,000 to provide financing necessary for construction. According to one underwriter, the bonds are essentially a hybrid and not well understood by investors. Their marketability is considered difficult.

One attorney expressed the opinion that this bond issue was difficult not only to place in investors' portofolios, but also difficult in terms of needed voter approval.

Support exists for special benefit assessments with some local agreement that a transit entity can levy assessments against benefited property owners to pay for improvements. On the other hand problems did exist for the Center City Commission in establishing the necessary legal statutes to implement the Fourth Street Mall project.

Initially, the Commission's intent was the creation of a special benefit tax district for special Center City improvements, including the Fourth Street Mall project. Legislation to this effect, 1968 Senate Bill 201, was introduced in the State Legislature but was defeated. It was apparent that part of the reason for its defeat was that it was to inclusive in the range of projects to which it could apply.[49] This consideration might be apropos to the implementation of such a Value Capture technique to finance a range of facilities and installations related to mass transit, if not the system itself.

Special benefit district legislation, however, was considered a "must" for projects such as the pedestrian mall, where benefits are derived directly by adjoining property owners and merchants. On the other hand, projects such as redeveloping deteriorated parts of the Center City and constructing public parking facilities seemed to have less tangible benefits to their specific environs and a more general benefit to the area as a whole and to the city. To this end, the more restrictive special benefit legislation, KRS 93A.010 (12) and 93A.030 was finally passed, with the joint backing of the City, the County and private organizations.[50]

The applicability of special benefit assessments as a Value Capture technique in Louisville is worthy of consideration. However, financial issues coupled with political considerations present a somewhat dim outlook for implementation when compared to tax increments presented next.

Tax Increments--Marginal Value Taxation

As the financial considerations of Value Capture techniques in Part 3 assert, a marginal value tax represents a technique for taxing those parties directly benefited and can produce substantial income. Similar to California, Kentucky has enacted tax increment financing statutes,[51] as articulated in Section 6b.

In Kentucky, it works this way. Unlike a special benefit assessment, tax increments do not impose an additional tax obligation upon a district. Rather, within the district, it allocates any increment of property tax revenues above a set amount, arising by virtue of publicly financed improvements in an urban renewal project, to the local development authority for the repayment of public monies so expended in the first place.

In essence, tax increment financing offers low administrative costs because the property assessment procedure is already established and no additional tax is levied. With this technique, pursuant to the Local Development Authorities Act and the Tax Increments Act, the increment represents the amount of money received by any taxing district which is determined by subtracting the amount of OLD REVENUES (tax revenues received by any taxing district from a development area in the last year PRIOR to establishment of the development area) from the amount of NEW REVENUES (revenues in year after the establishment of the development area). This would be for any year in which a taxing district and urban renewal or local development agency have agreed upon a division of revenues under the terms of a contract of release.[52] As noted in Section 6b, under KRS 99.760, no such contract shall require the release of less than 50% of such increments, or more than 95% of such increments, for a period of more than 25 years.[53] The derived incremental tax receipts are then used for debt service repayment and retirement requirements for any bond issue used to finance the public improvements in the first place.

With respect to bonded indebtedness, an agency, urban renewal or local development authority may issue bonds in which the principal and interest are payable:[54]

> *Exclusively from the income and revenues, including the increment of tax revenues as allowed by law, of the project or projects financed from the proceeds of such bonds.*
>
> * * * *

Such bonds, which includes all bonds, notes, interim certificates, debentures, or other obligations, are issued pursuant to the following features:

> *The bonds may be sold at less than par, and shall be sold at public sale held after notice has been given by publication pursuant to KRS Chapter 424, except as follows:*

(a) Bonds may be sold at private sale without advertisement to the federal, state or urban-county governments, or to an agency of any such governments;

(b) Payment for any portion of a project area may be made in bonds, provided, however, that: 1) any such transaction shall be approved by the price advisory coucil before its consummation; 2) such exchange is valid and legal pursuant to regulations of the Internal Revenue Service.

* * * *

The bonds may be sold with provision that they bear no interest, or only nominal interest, for a period of years, after which they may bear greater interest; and provision may be made for the capitalization of interest for periods not in excess of five years. More than one project may be established within the same project area, and each such project may be financed with a different issue or bonds with differing security. Each of said bond issues may be designed to meet standards required under federal statutes or regulations pertaining to the issuance of tax-exempt bonds; provided, however, that nothing herein shall be deemed to prohibit the issuance of any series of bonds, the interest on which may not be exempt from federal income tax. (Emphasis added.)

* * * *

In connection with the issuance of bonds, an agency, in addition to its other powers, shall have power:

(a) To pledge all or any part of its gross or net revenue to which its right then exists or may thereafter come into existence;
(b) To encumber, by mortgage, deed of trust, or otherwise, all or any part of its real or personal property in the project;
(c) To covenant against pledging all or any part of its revenues, or against encumbering all or any part of its real or personal property, to which its right or title then exists or may thereafter come into existence or against permitting or suffering any lien on such revenues or property; to covenant with respect to its sale, leasing or other disposition of any project or any part thereof; and to covenant as to what other, or additional debts or obligations may be incurred by it;
(d) To covenant as to the bonds to be issued and as to the issuance of such bonds in escrow or otherwise, and as to the use and disposition of the proceeds thereof; to provide for the replacement of lost, destroyed or mutilated bonds, to covenant against extending the time for the payment of its bonds or interest thereon; and to redeem the bonds, and to covenant for their redemption and to provide the terms and conditions thereof;
(e) To covenant as to the amounts to be cleared in the sale or lease of properties in a project or projects, the amount to be raised from revenue each year or other period of time and as to the use and disposition to be made thereof; to create or to authorize the creation of special funds for moneys held for development or other costs, debt service, reserves, or other purposes, and to covenant as to the use and disposition of the money held in such funds; (Emphasis added.)

* * * *

In respect to the financial considerations of bond issues secured by tax increments, Covington, Kentucky is making a test case in a downtown redevelopment project where the bond issue involved needs a clear letter of opinion from bond counsel. A suit was filed by the City of Covington to test the state law authorizing the establishment of a development authority and to clarify questions concerning an authority's operations and financing, as presented in Section 6b.

In Covington, the district under consideration is in a downtown area wherein the city seeks to issue bonds to construct a high-rise residential facility and a related parking facility deemed necessary for the successful operation of the installation. Here, the city is building the facility to be sold to a private developer. Thus, serious effort is being made to enable the use of tax increment financing in Kentucky.

In the Covington project, bond issue is envisioned as a 25-year term project. For such a bond issue, it is likely that both the tax increments and revenues from the project would have to be pledged for repayment of the debt service for the bond issues.

Tax increment financing can be expected to be used in relation to large private development situations where the tax base would be significantly increased. A significant legal problem is defining the district. This may be limited to the area where condemnation powers have been used, and it is

questionable whether the defined area of the district can extend beyond such areas taken by condemnation. In all likelihood, such defined areas will have to be DIRECTLY RELATED to the area of the project. Thus, for use in implementing a mass transit system, the underlying issue for tax increment financing will be the legally defined area of the district, given the latitude of supplemental condemnation used by the transit development agency. In all cases, such an area must be defined and agreement reached with a taxing jursidiction for the release of normal tax revenues for use in financing the project.

Tax increments offer a technique to capture maximum appreciation in value from those parties directly benefited by the development. However, the resulting magnitude of recapture to a development entity is only as great as the efficiency of the tax assessment, collection, and updating procedures, as well as being extremely sensitive to the maximum tax rates allowable and the share of the increment contracted for from the taxing entity. Further, under the current Kentucky laws, the maximum amount of revenues that can be derived by a development entity is determined by the amount of revenue necessary to defray debt incurred.

Develop/Hold--Real Property Development

This particular Value Capture technique involves the transit or development entity undertaking the development of facilities appurtenant to transit stop locations to realize income. The magnitude of revenues generated is a direct function of the scale and type of land uses the transit entity is able to construct and the amount of land acquisition that can be undertaken.

Given the legal findings presented in Section 6b, it appears that the transit entity could engage in the application of this instrument in some form.

One attorney foresees no problem in the transit entity making profits as earned surplus, as long as these retained earnings are used internally for transit-related activities. Moreover, TARC management expresses that they could engage management consultants and operators to oversee any real estate operations, via personal service contracts. The key question is to what extent, the transit entity, as a public agency, can pursue development of related commercial enterprises. The answer from the legal observations (Section 6b) is that a broad range of uses for the convenience and comfort of transit patrons would be permissible under Kentucky Statute. This includes convenience commercial facilities, newspaper kiosks and the like, as well as ancillary services such as parking. The occurrence of more incidental uses--commercial, office, and residential--is not without precedent, exemplified by Capital Plaza as previously presented.

The key to the success of this instrument is the type and scale of the land uses which can be developed. For instance, given a good market, commercial and/or office development would provide a greater return than parking facilities. One attorney commented that under the develop/hold technique, the aggregation and development of different land uses most probably would have to be within reasonable limits as prescribed by statutory law and deemed necessary for the successful operation of the transit system. In all likelihood, it might be necessary to pledge farebox revenues as a back-up for any transit-related development. Such a pledge, specified in the covenants and obligations of any trust indenture would seriously limit the transit entity from issuing revenue bonds in their own behalf for the development and construction of direct transit improvements. Given the total picture, such a contractual obligation might limit the intensity of development desired at any given transit stop location.

Financial consideration of this technique's application are essential to its implementation. Proforma analysis of market conditions, rent structures and occupancy rates cannot replicate the reality of the marketplace and as such do not free this technique from the risks associated with land development in general. Nonetheless, over the long-term, this technique would most likely provide a relatively continuous, stable stream of benefits accounting for any necessary debt service and ultimately dependent on the real estate market in Louisville in the future. While according to one economist, Louisville's economy tends to follow the nation's,typically economic indicators are substantially lower than the national scene. In fact, as a local real estate specialist indicated, the market is there, especially in suburban locations, but the financing is not. This stream of future benefits to be derived from this technique also does not provide front-end capital for mass transit improvements, only capital for future uses. In fact, some source of funds must be available to implement this technique at the outset. To this end, various forms of indebtedness might be considered.

For instance, according to one underwriter, regarding TARC issuing its own revenue bonds to build parking facilities--park and ride with structured parking--the probability is quite high that such bonds would not be accepted willingly by underwriters, without specific covenants and obligations. The significant issue is the pledge of security for repayment of debt service. Historically, parking revenue bonds are the high risk type of bond issue and have consequently been rated the lowest of speculative issues. The problem is with the failure of parking revenues to provide an adequate base for debt service. Failure has been quite high across the country and Louisville could very likely experience the same. In any event, additional revenues would have to be pledged as was done for the Belvedere parking and Galt House Hotel installation in Louisville's Riverfront Plaza complex. However, it might be possible to provide an adequate pledge if the facility were leased to an independent operator. Here a negotiated lease would be implemented with revenues pledged for repayment of debt service. Yet, it is interesting to note that revenues derived from the publicly financed Belvedere parking has been more than adequate to meet debt service requirements without any need for additional revenues for security. THIS SURPLUS IS THE ESSENCE OF THIS TECHNIQUE.

Current plans, however, as indicated by one TARC official call for the transit entity to provide parking facilities with the intention of operating such facilities without fee as a convenience for TARC's passengers.

Another analogy is worthy of consideration on this issue. Consultants to Center City Commission have indicated that in the case of the proposed parking structures in the redevelopment plan,

> *"annual revenues must be at least equal to the sum of annual operating costs, amortization, and interest payments. To issue revenue bonds at a reasonable interest rate in any given facility, a feasibility study must indicate that the debt service ratio (projected income less operating costs compared to annual costs for debt retirement and interest) is at least 1.5. In other words, to obtain a reasonable interest rate on the revenue bonds, it must be shown that the annual revenues available for debt service are at least 50% greater than the annual estimated operating costs and debt service requirements for these purposes. If the parking structures, in fact, perform as expected, it is likely that, over time, a substantial amount of money will become available for use by the general fund of the City or for underwriting future development projects.*[55] *(Emphasis added.)*

Generally, these observations constitute a favorable prognosis for implementation of this Value Capture technique. Develop/Hold revenues would become available for underwriting future development projects--capital for future and on-going transit improvements or for defraying the unmet costs of operating such improvements.

Develop/Sell--Real Property Development

This Value Capture technique involves the entity developing facilities and installations appurtenant to transit stops, adjacent and/or air rights, and once development is completed or after some holding period, selling the developed properties for capital gains. While legally an analogy can be drawn from urban renewal and local development authorities as to property assemblage and disposal; financially, the use of this instrument is more tied to the whims of the real estate market and demand for the projects developed. Current market evidence suggest rather dim prospects of this technique's capability of producing substantial income in Louisville.

There seems to exist uniform agreement that the direct application of this technique is most suited to the development of residential land uses. The most likely use related to public purpose is low to moderate income housing. The application of this technique is not well suited to commercial uses, as no strong market exists in Louisville. This is particularly true for properties having been held for some period.

Further, one source feels that this technique is least realizable, because the transit entity would have to retain fee simple interest in land parcels or other development rights acquired by eminent domain and financed by some form of bonded indebtedness. The covenants and obligations of the bond issue would prevent future sale of the parcels unless other arrangements are made for debt service. This problem is also compounded by the illiquidity of real estate development in terms of future divestment and, thus, the security offered any bondholder, unless a negotiated purchase agreement is entered into with a major purchaser with a sound financial position prior to construction of the facility and the bond issue. In addition, sale of land

parcels acquired by condemnation would most likely require that such parcels be determined as unnecessary and subject to no gross abuse.

In summary, the application of this technique has the potential for high yield. However, again the return is a function of property assemblage and the scale and type of land uses developed. It does not provide front-end capital for initial transit system improvements. Moreover, the return is lump-sum with its size dependent on both the risk of illiquidity at divestment and the nature of the sales contract itself.

Hold/Sell--Real Property Development

With this Value Capture technique, the entity acquires transit related land parcels and development rights, holds them for some period, and then divests its interest at sale to recoup the increment in land values attributable to the proximity to transit stop locations. The legal underpinnings of this technique relate directly to the magnitude and extent of property assemblage and legal findings in Section 6b about public purpose, supplemental condemnation for future use, and air and subsurface rights development.

The original land most likely would have to be acquired without the intent of turning a profit. This leads to the problem of condemning for future use land parcels not needed for transit improvements. Land parcels, initially acquired without gross abuse later deemed unnecessary would provide the basis for the hold/sell technique. If this is deemed legally unjustifiable, the use of this technique would be precluded. As in California and Texas, general agreement among underwriters indicates that no bonds could be publicly marketed on the promise of repayment from future land sales, because of the illiquidity of real estate. Financing from other sources outside of bonded indebtedness overcomes this problem. Nonetheless, the Louisville and Jefferson County Riverport Authority, whose land dealing is presented in Section 6b, is a noteworthy analogy for this instrument.

Organized in December 1965 by joint action of the City of Louisville and County of Jefferson, the Riverport Authority is a public body politic and corporate under laws of the Commonwealth of Kentucky, for the purpose of establishing, maintaining, operating and expanding river and riverport navigation facilities.[56] Some 2,800 acres in Southwest Jefferson County have been designated for development by the Authority.[57]

Primary functions of the Riverport Authority are to preserve this acreage in Southwest Jefferson County, to develop and sell this property at a profit, and with these profits to build and operate a modern intermodal waterport to serve the Kentuckiana area. It attempts to attract new industries and help existing industry locate and expand facilities along the Ohio River.[58]

The nature of the public purpose is increased availability of industrial sites deemed necessary for the successful operation of the port facility, according to one authority.

Here land was purchased at an extremely low market value to be developed for industrial sites to be sold at a greatly appreciated value. Initially, land was acquired at $1,500 per acre ($.035/sq.ft.) to be sold at $15,000 per acre ($.34/sq.ft.). According to Louisville and Jefferson Chamber of Commerce, the land now is being offered at $34,000 per acre ($.78/sq.ft.)--a return of over 2,000 percent.

To finance this project revenue bonds, 7-3/4s series 1969, due serially to 1994, were offered in the amount of $6,325,000. These were purchased at 98.001, with a net interest cost of 6.829% and reoffered by the underwriters July 18, 1969 at 100, according to Moody's Investor Service.[59]

The Riverport Authority is the issuing entity. The proceeds of the bond issue were used for land acquisition, site preparation, and initial development costs. In reference to the aforementioned problem regarding bond issues secured by future earned sales, this analogy presents a viable method for circumventing the problem. Technically, security is payable from income and revenue derived from payments under lease agreement between the Authority and the County of Jefferson.[60] Yet, in actuality, according to the underwriter of this issue, security for repayment of debt service is payable from income derived at sale of industrial sites--land sold at appreciated values.

In the event that income is not derived from revenues at sale, a sinking fund was established to meet the interest requirements for this issue with the County pledging its tax base revenues as a basis for the sinking fund requirements. In essence, the County is providing the long-term capital necessary for this project with the argument running that sale of the properties is expected to be so profitable that the security of the

bond issue is without jeopardy of default. This is one answer for successful application of this technique; however, whether a transit entity could implement such an aggressive policy is questionable. Yet, as noted in the legal observations, once property has been validly acquired, practice has been to authorize disposition of "surplus" and such disposition is specifically set out in KRS 8 271-020, for TARC.

In summary, the yield from this technique is keyed to the magnitude of the land acquisition and the appreciation in value of parcels or air rights acquired. This technique's application does not provide front-end capital except for future transit improvements. The return is in lump sums, keyed to the sales pace of parcels sold off. Thus, some variability can be expected in the returns realized as a function of the real estate market. Given the precedent in Louisville, and statutory authority to dispose of surplus land in TARC's legislation, application of this technique appears to have potential for transit development in the city.

Lease--Real Property

This Value Capture technique provides that the transit entity enter into long-term ground leases or air rights leases of transit-related land parcels. The general performance of this instrument is most akin to the various taxation instruments, especially tax increments and ad valorem taxation, as presented in Part 3. The magnitude of the income stream to be realized is a direct function of the legal capability of the transit entity to acquire, control, and manage transit-related land parcels.

Given the necessary legal underpinnings as discussed in Section 6b, implementation of this technique appears possible in Louisville. An analogy can be drawn to the existing Louisville Riverfront Corporation. This analogy is also appropriately applicable to the develop/hold technique.

Incorporated on August 24, 1966 as City of Louisville Riverfront Development and Operating Commission, Inc., as a public body politic and corporation for purpose of assisting overall development of the downtown riverfront area, through construction of a large parking facility, office buildings, hotels, and apartment buildings. The corporation was established by the City of Louisville to act in improving, acquiring and financing property which the City owns or wishes to acquire or lease and make use of for public parking and other purposes.[61]

With these objectives, the Riverfront Corporation proceeded to implement the Riverfront Plaza Complex, including the Belvedere Park, public parking, and the Galt House Hotel--all built on publicly owned land, according to an attorney for the city. This property was condemned with a public purpose of the development of the Ohio Riverfront. Moreover, the development of a hotel facility was deemed necessary for success of the overall project.

The Riverfront Corporation, a non-profit holding company issued, first, mortgage revenue bonds for initial land acquisition and for construction of a 1900 space parking garage with a park on top. These revenue bonds in the amount of $10,000,000 were offered in November 1971. The Riverfront Corporation accepted an annual cost of borrowing of 5.75%, purchased at 98.0085, running to maturity in 2010. Currently, these are transacted in the market with a 8.25% yield, according to one underwriter. Additional revenue, required for security by the underwriters, was provided from annual lease rentals paid by the City of Louisville to the Riverfront Corporation (derived from parking garage revenues), by lease of a site to the Home Supply Corporation (the Galt House Hotel), and revenues derived from on-street parking.[62] It is also worth noting that Center City businesses, such as First National Bank of Louisville, assists and subsidizes this facility by annual lease of parking stalls for their employees.

While the use of the Value Capture technique presents a plausible avenue to explore for transit application, ground leases present another problem to private developers, according to one local real estate consultant. A private developer needs to have fee simple title to the land to obtain permanent financing. This is in direct conflict with the public entities' need for ownership at a transit stop. Most institutional lenders take a dim view of subordination for a percentage share. The lender wants to have first lien on the land for full control, which subordination does not offer. The Galt House/Belvedere complex example provides one answer. In short, the public entity conveys fee simple title to the private developer to obtain permanent financing and then the title is reconveyed back to the public sector. This is accomplished by a sale-buyback arrangement.

Further implications of this may be seen in the Riverfront Plaza Complex. Having established a lease arrangement for the land, the Galt House proceeded to approach lending institutions for permanent financing, executed as a foreclosure mortgage on improvements.

A serious implication, related to mortgage bonds (also school bonds), is that the state or city cannot lose title to the property--thus the necessity for tax free bonds to allow acquisition of said property secured by lease revenue. Here the Riverfront Corporation had the authority to issue such revenue bonds. The advantages of tax exempt financing allows the City to acquire properties for public benefit, in this case, the Riverfront Promenade, funded in part by lease revenues in excess of debt service. In turn, this also provides substantial benefits for the developer: (1) lower development costs, through lease arrangements for property, eliminating some of the developer's need for front-end equity, (2) from the lender's point of view, the potential clout of the public entity tends to insure the success of the project.

Given the legal feasibility, presumably bonds could be publicly marketed with the promise of repayment secured by such leases. These type of leases do not provide any front-end capital, but revenues derived could be applied to future or ongoing capital improvements. In addition, the lease contracts would allow the transit entity to maintain control over the type and quality of improvements to be developed. From a financial viewpoint, this technique is most like the develop/hold technique. The income capacity is good and little variability would be expected given the long-term of such leases, as demonstrated in the stop examples in Part 6d. It is important that escalation clauses in the lease contracts be used to reflect future changes in the valuation of the development rights. In short, it seems feasible for a transit entity to enter into contractual lease agreements with a private developer. Here ground leases offer a lot of potential.

Participation--Real Property

In this Value Capture Policy technique, the transit entity contributes land parcels in some type of joint venture wherein developer(s) would undertake improvements. The recapture for the transit entity is keyed to a percentage of the developer's income stream. With respect to transit entities, legal observations in Section 6b provide an analysis wherein public agencies are expressly authorized to enter into joint agreement by statutes, KRS 96A.370.

The prognosis for application of this technique is unclear. It is very similar to a land lease, except that, in this case, the transit development entity would become an equity partner based on the contribution of the land. What is unclear is what would this technique provide which isn't already provided in a land lease arrangement? With either, the transit development entity should seek partial control over the type and quality of the uses developed. In participation this would be achieved through a contractual agreement with the primary developer.

Many of the same issues surround the application of this technique. Returns are directly related to the amount of land acquired for valid public purposes. Financing the acquisition using bonded indebtedness faces questions of obtaining a clear opinion letter given the future stream of returns anticipated and the qualifications of the participating developer. Investor confidence in the bond issue is dependent upon the same points. Finally, the transit development entity would need the authority to enter into agreements with private developers in applying this technique.

It is worthwhile to note that, in reference to urban renewal projects, the courts in Kentucky have held that such agency's revenues cannot be applied to the acquisition and operation of a public enterprise jointly with a private corporation.

In the end, these issues about participation beg further testing, as little opinion exists as to its direct application or precedent for transit entities.

SOURCES AND USES OF FUNDS FOR VALUE CAPTURE POLICY

Central to much of the discussion of various Value Capture techniques has been the requirement for financing during the implementation of the transit improvements. The intent of this section is to address this issue across the various funding sources--federal, state, and local--to give some perspective to financing arena in which one might seek funds for applying these techniques.

The Federal Government, under the Urban Mass Transportation Act of 1964, as amended, provides assistance in the form of capital grants. Under this procedure, applicants receive 80%

of the cost from UMTA, with the remaining 20% coming from local sources.

According to one source, with a capital grant from UMTA, in the amount of $9M, TARC acquired the Louisville Transit Company. In this acquisition, TARC acquired the assets of the transit company via negotiation for an amount less than their fair market value. The company had no long-term outstanding debt obligations or any liabilities which would constrain TARC from future bond issues. Moreover, TARC does envision continued future assistance from UMTA.

At the state level, Kentucky law does not provide any direct capital or operating assistance to transit entities. However, the state legislature has authorized bonded indebtedness and financial assistance through a payroll/occupational tax, a property tax or license plate fee respectively--both to be administered at the local level and subject to voter approval.[63]

State House Bill 679 passed in March 1974, permits TARC to receive financial assistance through the aforementioned tax proposals. In November 1974, the occupational tax was put to public referendum and was accepted. However, still a great deal of uncertainty exists among financial experts in the field. According to TARC's Comptroller, from the occupational tax, TARC receives 5/10 of 1% in revenues. For fiscal year 1976 this amounts to $6.2M, with $4.2M required for operational expenses leaving $2.0M in unappropriated funds, a surplus. There are no restrictions on the use of these tax receipts. For instance, these tax receipts can be used to build the new garage facility or park-and-ride lots per their capital improvement plan. The receipts from the occupational tax are intended for Louisville's 20% local match for UMTA capital grants. In addition, the occupational tax will be used to fund any deficits in TARC's operating program. To this end, TARC's position in Louisville is considered a fortuitous situation compared with other transit entities, because the occupational tax should fund the deficit for a good many years.

Transfer of occupational tax receipts to TARC is administered by and at the discretion of the Jefferson County Fiscal Court. The occupational tax is collected and placed in the Sinking Fund administered by the Sinking Fund Commission. From the Sinking Fund, the appropriate share for TARC is placed in a special interest bearing account, the Mass Transit Fund. This account is used for TARC's operating expenses: requests for appropriations are made, reviewed, and checks are drawn on this account. Thus, all revenues and expenses are controlled by the officers of the Fiscal Court.

The transit authority enabling legislation (Chapter 243 Laws of 1970) permits bonds to be issued for financial purposes. Specifically, the authority may request the governing bodies in its operational jurisdiction to appropriate funds from general local revenues to provide to the authority the proceeds from general obligation bonds; such bonds are subject to voter approval. Alternatively, the transit authority may issue bonds in its own name supported solely by authority revenues and income. These bonds are also subject to voter approval.[64] In addition, TARC can issue bonds for general purchases as well as pledge mortgages. TARC can invest in government securities. The restrictions for the use of their funds is outlined in Section 5 of their enabling legislation. Based on this, the $2.0M in excess tax receipts from the occupational levy is intended to be invested in government securities.

According to one expert, a significant problem could arise if the occupational tax receipts were pledged as security for any form of bonded indebtedness. This occupational tax can be administered at the whim of the County Fiscal Court--this legislative body or any newly elected body could suspend collection of tax receipts or change TARC's prorated share or even strangle TARC's operation by tight budgeting. Thus, it is unlikely that the occupational tax would be accepted by underwriters and investors as a proper method for debt service payment, except as a tertiary lien for repayment. For any revenue bond issue, the instability of the occupational tax does not offer much guarantee for bondholders, except in the case of short-term notes. The covenants and obligations of an issue decree that the structure of the issuing entity cannot change.

Finally, some points are worthy of consideration with respect to bonds issued in behalf of TARC by the City of Louisville or Jefferson County. In this respect, state statutes impose limitations on the bonded indebtedness of cities.

For the City of Louisville, the maximum indebtedness permitted is 10 percent of the assessed valuation. For Jefferson County, it is 2 percent of the assessed valuation. While statutory restrictions on indebtedness are not a critical barrier to financing pub-

lic improvements, city debt service requirements are presently near the limits for sound fiscal budgeting, and new bond programs in 1975 will require either sacrifices from other programs or expansion of the tax base. Moreover, restrictions on the County's ability to raise revenues through property taxes can potentially limit its ability to assume the cost of a major bond program.

In general, Kentuckians are adverse to spending money, especially in regards to voted bond issues and new taxes. Typically, increasing bonded indebtedness results in an expanding of the tax base to support such bond issues.

The history of the use of revenue bonds are extremely fragmented for various types of uses and municipalities. The issue of revenue bonds can be summarized as having a poor prognosis, typically because of the poor voting record of Kentuckians, according to one source.

Finally, industrial revenue bonds present a unique consideration. Kentucky is one of a few states to have such a funding source. Moreover, Section 1036.4, Code of Federal Regulations, Title 26, Internal Revenue, specifies tax exempt bonds usage for mass commuting facilities. According to one attorney, such issues would need to be court tested, under the rules for industrial revenue bonds for profit making enterprises. Kentucky has a history of industrial revenue bond issues, especially in smaller municipalities where an expanded economic base is sought. The typical industrial bond issue is a build/lease arrangement with a major private corporation. The corporation's financial strength and position is considered the chief criteria for rating and marketability. In Kentucky, per Federal codes, industrial revenue bonds are primarily issued for manufacturing, pollution control and hospital installations. An issue for mass commuting facilities is unknown. Under current regulations the issued amount of the debt instrument could not exceed $5M. It is interesting to note that industrial revenue bonds are one of the last forms of laissez faire activity performed by municipalities. By the end of 1975, however, all industrial revenue bonds will be required to be registered by the Securities and Exchange Commission and, thus, control will pass to the federal government.

In short, a need does not particularly exist for such issues in Louisville, according to one economist. While the County Judge is publicly in favor of such bonds, established industry is "turned off" to the idea and seeks better control for any potential issues. In this area of public financing, one banker poses a dim view feeling that these bonds represent a windfall to a class of beneficiaries that is unjustifiable and unfair for the older established businesses in the community.

FINANCIAL SUMMARY OF VALUE CAPTURE APPLICATION

The financial discusssion preceeding has been directed at general problems and opportunities for using Value Capture techniques in Louisville. As discussed earlier the uniqueness of each development opportunity and the high variability between different opportunities makes general conclusions questionable. However, using the four example stop situations (section 6-C) with their nine development alternatives it is, for sake of example, possible to quantify potential returns.

In each alternative the development program formulated is based on estimated impact of the transit improvements, the local market for the uses proposed, existing zoning restrictions, and overall considerations for the community setting. For each example appropriate, Value Capture techniques were selected. The pro forma analyses as shown in Section 6-D evaluated the potential returns for each development program. This discussion summarizes the results. Overall the develop/hold, land lease, hold/sell, and increment taxes were applied in these examples.

Assumptions

Basic assumptions used in the pro forma analyses for Louisville include:

1. Cost of borrowing for development entity was assumed at 6% unless joint development was assumed. In these cases when the private developer was the major participant - 9% was used.

2. Accumulated cash returns from project were computed for a 25 year period.

3. Unless stated, an annual inflation rate of 5% was assumed for both project revenues and operating expenditures.

4. All data used in the analyses were in 1975 dollars.[65]

5. Transit segment length was computed as the distance on both sides of the stop along the transit alignment to the midpoint of the distance between that stop and the next.

   The transit System assumed is that presented in figure 6/1. This was prepared by Rice Center in consultation with local planners for purposes of these examples only.[66] Ridership estimates vary greatly between past planning studies, thus stop programs are based on the average of these estimates of passenger flows.

6. Transit segment costs were estimated by Rice Center. These assume system improvements of an exclusive busway or buslane type with grade separation only at major cross-streets. In all cases the busway improvements parallel existing road or railroad rights-of-way.

7. The transit segment cost estimates included the costs of right-of-way acquisition, buslane construction, grade separations (where needed), specialized signalization and markings, express buses, and overall development fees and contingencies. These do not include the costs of the transit station improvements proper. These, in each development alternative, were included in the development analysis as a "public institutional" use. Each station varies with the assumptions of each alternative, thus the reason for this method of inclusion in the analysis.

One other consideration should be emphasized. Louisville presented a situation where estimation of the impact of future transit improvements in the community is extremely difficult to evaluate because of the fairly high level of accessibility presently enjoyed by the residents. This research does not intend to conclude that the transit system herein assumed would be successful in attracting large numbers of patrons. The system assumed provides a lower limit of fixed capital improvements envisioned as necessary to encourage or induce market or developer response to the stop locations chosen. One should keep in mind that the realization of the development examples shown herein would be tied to the overall success of transit improvements in the city of the nature of those assumed herein. See Part 2 for a discussion of this issue.

Investment Yield

Overall, based on the pro forma analyses of the Value Capture application to the development alternatives of Section 6-D, it is apparent in figure 6-2 that a wide range of returns can be anticipated. This range is from a loss of $12 thousand in the Valley

STOP SITUATION	DEVELOPMENT PROGRAM	VALUE CAPTURE TECHNIQUE APPLIED	LAND COST ($/ef)	PARCEL SIZE (kef)	DEVELOPMENT CAPITAL COST ($X1000)	NET ACCUM. CASH FROM DEVELOPMENT ($X1000)	NET PRESENT VALUE (DISC@ 8%) ($X1000)	TRANSIT SEGMENT LENGTH (MI.)	TRANSIT SEGMENT COST ($X1000)	PERCENT COST DEFRAYED W/ ACCUM. CASH	PERCENT COST DEFRAYED W/NET PRES. VAL. @ 8% DISCOUNT
Louisville-G.E. I (Buechel Bank Road)	Stop, Parking, Commercial	Develop/Hold	1.40	350.	2,730.	4,320.	1,220.	1.6	1,700	254.	72.
Louisville-G.E. II	Stop, Parking, Commercial, Office, Housing	Develop/Hold, Land Lease	1.40	1090.	15,300	4,520.	-680	1.6	1,700	266.	-40.
Louisville-Valley I (Valley Station Road)	Stop, Parking, Commercial, Office	Develop/Hold	1.30	585.	8,560	7,220.	1,420.	1.5	800	902.	177.
Louisville - Valley II	Stop, Parking, Commercial	Develop/Hold, Land Sale	1.30	367.5	2,390.	4,350.	1,340.	1.5	800	544.	167.
Louisville-Valley III	Stop, Parking	Develop/Hold	1.30	55.	365	-12.	-62.	1.5	600	-2.	-8.
Louisville-Watterson I (Wattereon Xway @ Southern Pkway.)	Stop, Parking, Commercial, Office	Develop/Hold, Land Lease	4.00	300.	5,760.	730.	-610.	.9	1,350.	54.	-45.
Louisville-Wattereon II	Stop, Parking, Commercial, Office	Develop/Hold	4.00	210.	8,760.	1,930.	-630.	.9	1,350	143.	-47.
Louisville-CBD I (2nd and Liberty Sts.)	Stop, Parking, Commercial	Develop/Hold	8.34	88.2	3,470	3,290.	710.	1.2	500.	658.	142.
Louisville-CBD II	Stop, Perking, Commercial, Office	Develop/Hold Land Lease	8.34	88.2	2,510	6,230.	1,770.	1.2	500.	1246.	355.
Louisville-CBD III	Stop, Perking, Commercial, Office	Develop/Hold, Increment Tax Financing	8.34	88.2	2,150	7,620.	2,290.	1.2	500.	1524.	457.

SUMMARY AND COMPARISON - INVESTMENT ANALYSIS RESULTS

Fig. 6/2

Station example where the develop/hold technique was applied to development of a transit stop and parking only[67] to a profit of over $7 million accumulated in the 25 year development period in the Valley Station alternative where community commercial and local offices were developed and held by the transit development entity. In the CBD similar returns of some $7 million were experienced using increment taxes. This assumed 90% of increased tax assessment went to the transit development entity. In actuality, this amount of return to a development entity would be limited to an amount equal to the cost of constructing the transit improvements at this stop, approximately $2.6 million. (See discussion on tax increments, this section.)

Conclusions about the amount of land validly acquired by the transit development entity and the relation to the overall magnitude of returns appear to be substantiated by these results. The influence of the types used developed as well as Value Capture techniques employed is substantial and also are significant factors in the results computed in these examples.

There is little relationship between the transit investment cost and the overall magnitude of returns exhibited by these examples. It is difficult to conclude that this would be the overall case in Louisville, since the transit improvements assumed in this analysis were inexpensive in comparison with those assumed in Los Angeles or Chicago. This accounts for the very high percent of transit costs defrayed by such development alternatives such as Valley Station I and II and CBD I, II, and III.

Questions about discounting result in substantial differences in returns that can be expected given the Louisville examples. If the transit development entity had other uses for its funds and thus, for example, assumed a discount rate of 8% in its investment decisions, the net present value of the development alternatives is obviously much less. In several cases such as General Electric II and both Watterson I and II, viable alternatives without discounting, now show net losses. This is indicative that these projects show a negative income stream in early years turning positive only in the latter years of the development period. (See pro forma analyses results, Section 6-D.) Overall, based on the examples, the range of returns defrayed from -2% to 1500% of the transit development costs without discounting, from -47% to 450% with discounting considered.

Impact of Inflation

In the proforma analyses of these examples, an inflation rate of 5% was assumed in the net incomes stream. Given other assump-

STOP SITUATION	TRANSIT SEGMENT ESTIMATED COST ($ X 1,000)	3% INFLATION ASSUMED ACCUMULATED CASH FROM PROJECT ($ X 1,000)	INTERNAL RATE OF RETURN (%)	PERCENT TRANS. COST DEFRAYED	5% INFLATION ASSUMED ACCUMULATED CASH FROM PROJECT ($ X 1,000)	INTERNAL RATE OF RETURN (%)	PERCENT TRANS. COST DEFRAYED	8% INFLATION ASSUMED ACCUMULATED CASH FROM PROJECT ($ X 1,000)	INTERNAL RATE OF RETURN (%)	PERCENT TRANS. COST DEFRAYED
Louisville-G.E. I (Buechel Bank Road)	1,700.	2,040.	9.5*	120.	4320.	11.2*	254.	9,460.	13.9*	556.
Louisville - G.E. II	1,700.	-4,220.	6.3* -N.C-**	-248.	4520.	7.7* 1.9**	266.	34,580.	10.0* 32.1**	2,034.
Louisville-Valley I (Valley Station Road)	800.	1,560.	7.6*	195.	7220.	9.1*	902.	19,960.	11.6*	2,495.
Louisville-Valley II	800.	2,190.	9.9* 18.4**	274.	4350.	11.6* 30.7**	544.	9,120.	14.4* 46.1*	1,140.
Louisville-Valley III	800.	-180.	5.3*	-23.	-12.	-6.5*	-2.	360.	8.6*	45.
Louisville-Watterson I (Watterson Xway @ Southern Pkway.)	1,350.	-4,300.	5.1* -8.9**	-319.	730.	6.2* 11.7**	-54.	14,960.	8.3* 29.3**	1,108.
Louisville-Watterson	1,350.	-2,570.	5.9*	-190.	1930.	7.3*	143.	12,060.	9.5*	893.
Louisville-CBD I (2nd and Liberty Sts.)	500.	910.	7.8*	182.	3290.	9.4*	658.	8,650.	11.9*	1,730.
Louisville-CBD II	500.	-250.	7.6* -6.4**	-50.	6230.	9.1* 35.9**	1,246.	27,030.	11.6* 101.9**	5,406.
Louisville - CBD III	500.	4,790.	7.6* -N.C.-**	958.	7620.	9.1* -N.C.-**	1,524.	14,010.	11.6* -N.C.-**	2,802.

INFLATION EFFECTS - INVESTMENT ANALYSIS RESULTS

Fig. 6/3

tions, substantially differing results occur. Since, it is impossible to assess the rate at which future inflation will occur, it is valuable to notice the range of results that could be anticipated with various inflation rates.

Figure 6/3 presents a summary of the effects of three inflation rates in net income of 3%, 5%, and 8%. Using the total accumulated cash from each project over its 25 year development period (no discounting considered), ranges in defrayment in the transit segment costs are from -320% to 950% with 3% inflation assumed to 45% to 5000% with 8% inflation.

Rates of return for parts of the developments varied considerably, also. Using the internal rate of return on develop/hold portions of each project as an index these varied from 5.1% to 9.5% with 3% inflation to 8.3% to 14.4% with 8% inflation. One can, given the evidence of these examples, not make investment decisions without being aware of the impact of inflation over time on these decisions.

Income Stream

Earlier discussion of financial considerations of Value Capture indicated the importance of the stream of returns over time in evaluating investment decisions. Figure 6/4 presents the Louisville development examples summarized by annual streams of returns in development years 1, 5, and 10. Given the evidence of the examples, it is clear that the develop/hold technique does not provide "front end" income as does the land lease or increment tax financed schemes in the CBD. By year 10, however, the develop/hold technique is providing returns similar to those shown in the overall comparison of the development alternatives in figure 6/2.

Based on this analysis, one can observe that the techniques would be able to provide adequate revenues to defray the bonds used to construct the facilities in some cases while in others the amount needed would not be provided. Again, these mixed findings underscore the overall need to evaluate the results of Value Capture application on a situation by situation basis.

Evaluation of Techniques Applied

As pointed out in prior discussion, the develop/hold technique appears to provide less stable an income stream than leases or tax increments when applied in the examples. This is shown in Figure 6/4. Overall, total returns provided by the develop/hold technique may compare with those provided by leases or tax incre-

STOP SITUATION	VALUE CAPTURE TECHNIQUE APPLIED	DEBT SERVICE SYSTEM SEGMENT COST ($ X1,000)	ANNUAL DEBT SERVICE REQMTS. ($ X 1,000)	YEAR 1 YEAR 1 CASH FLOW ($ X 1,000)	PERCENT OF DEBT SERVICE DEFRAYED	YEAR 5 YEAR 5 CASH FLOW ($ X1,000)	PERCENT OF DEBT SERVICE DEFRAYED	YEAR 10 YEAR 10 CASH FLOW ($ X 1,000)	PERCENT OF DEBT SERVICE DEFRAYED
Louisville-G.E. I (Buechel Bank Road)	Develop/Hold	1,700.	153.	-11.2	-7.2	32.5	21.	100.5	66.
Louisville-G.E. II	Develop/Hold, Land Lease	1,700.	153.	-476.9	-312.	-324.	-212.	-80.9	-53.
Louisville-Valley I (Valley Station Road)	Develop/Hold	800.	72.	-167.6	-233.	-59.4	-82.	109.2	152.
Louisville-Valley II	Develop/Hold, Land Sale	800.	72.	-1.1	-2.0	37.3	52.	97.1	135.
Louisville-Valley III	Develop/Hold	800.	72.	-13.9	-19.	-10.7	-15.	-5.7	-8.
Louisville-Watterson I (Watterson XWay @ Southern Pkway.)	Develop/Hold, Land Lease	1,350.	121.5	-192.8	-159.	-152.2	-125.	-69.7	-57.
Louisville-Watterson II	Develop/Hold	1,350.	121.5	-285.9	-235.	-199.9	-165.	-65.7	-54.
Louisville-CBD I (2nd and Liberty Sts.)	Develop/Hold	500.	45.	-60.6	-135.	-15.0	-33.	55.9	124.
Louisville-CBD II	Develop/Hold, Land Lease	500.	45.	48.1	107.	75.3	167.	150.4	334.
Louisville-CBD III	Develop/Hold, Increment Tax Financing	500.	45.	76.1	169.	130.4	290.	214.9	478.

STREAM OF RETURNS - INVESTMENT ANALYSIS RESULTS

Fig. 6/4

ments. Again, one should keep in mind that tax increments are limited to defraying the debt of the transit development project while develop/hold and land leases have no limitations on their total amount of income. This is not shown in the example application results.

It is important to note that ad valorem taxation, special benefit assessments, develop/sell, and participation techniques were not used in the examples. Thus, overall observation about or comparison of all of the Value Capture techniques presented by this research cannot be made based on the example applications and cannot be estimated city wide because of uncertainty about the impact of the mass transit improvements.

It does appear, however, that mixed results should be expected, and while overall prognosis for applying Value Capture is good, one should be equally aware of those situations where projects loose money due to the size and type of development program undertaken. Again, it should be pointed out that Value Capture's financial success is closely tied to the overall success of mass transit and its concentration of improved accessibility. This research has assumed the potential success of the transit improvements and, thus, has not investigated the success or failure for mass transit in Louisville in general.

6d Community Design Findings

Selection of specific stop situations in the Louisville community have not only provided an opportunity for financial application but an opportunity for understanding the impact of Value Capture on the community as well. These impacts may appear directly as benefits from the improvements constructed or indirectly as a result of changes in the community that transit and related development help to foster.

These impacts may take the form of improving local services available as in the case of the Buechel Bank Road stop. Moreover, most every application of Value Capture as shown in the examples increased levels of employment opportunities, mobility and access to surrounding areas of Louisville. Residential services were not always increased as in the case of several of the examples. In fact, the Watterson and Southern Parkway example shows the disruptive effect transit stop related development may have on surrounding communities. In this situation, several established residences were removed for the provision of transit, parking, local commercial, and small office services.

Redevelopment potentials for Value Capture were exemplified in the CBD stop. Also of importance, was the examination of Value Capture on undeveloped sites. Valley Station and the Buechel Bank Road examples provided an opportunity to examine the less disruptive effects of Value Capture in these undeveloped site locations.

Overall, the evaluation of the benefits or disbenefits of Value Capture in Louisville was impeded by uncertainty of growth in the region, thus emphasizing potential problems of redistribution rather than net gain at each stop location. Grappling with a concept for the appropriate form of future mass transit for Louisville was also a factor in making evaluation of the effects of Value Capture more difficult.

LOUISVILLE: PROTOTYPE STOP CONTEXTS

The most clearly defined opportunity in Louisville was the possiblity of studying Value Capture potential related to the General Electric Appliance Park, a major industrial facility employing about 20,000 workers. In addition to the industrial complex, this location also has major residential development nearby as well as substantial undeveloped land.

Valley Station represented an "end of the line" situation which is clearly suburban to rural in nature, and where effects of development would be primarily on the residential population. Levels of development and land costs are currently low, while substantial undeveloped land remains available.

The third stop in Louisville, where Southern Parkway meets the Watterson Expressway, was selected to illustrate problems and opportunities in an established, fully developed, middle income residential area. The stop also offered the opportunity to study relationships of transit to major highway facilities, in a situation where little or no undeveloped land is available.

The final stop selected in Louisville was a proposed transit terminal in the CBD area. Significant cleared and vacant land is avail-

able. As with other CBD contexts, employment, shopping and visitor populations represent the major community enhancement focus, but in the Louisville CBD, transient residential units house a local resident population uniquely affected by Value Capture.

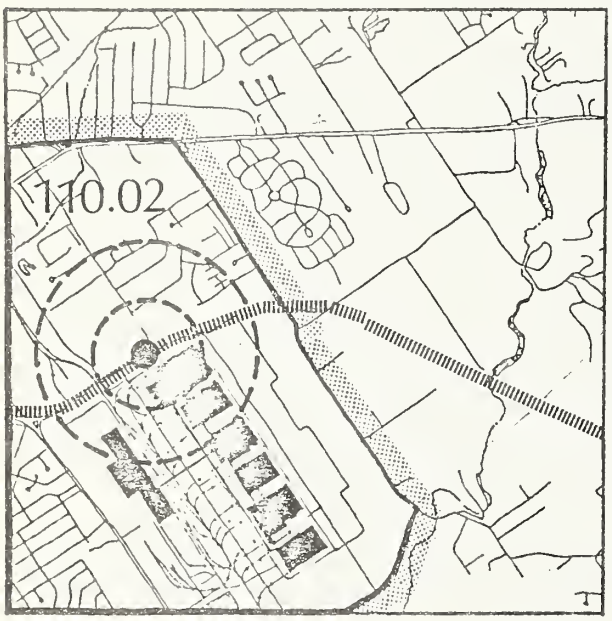
Buechel/G.E.

STOP CONTEXT

The Buechel/G.E. stop is located in Southeast Louisville near the plant entrance to the General Electric Appliance Park, which is Louisville's largest employer with around 20,000 employees. Surrounding the plant itself are smaller industrial facilities, and a mixture of undeveloped land, older single family residences, and new multi-family construction.

The assumed transit system is a grade-level, exclusive right-of-way bus system with grade separation at major streets and railroads. The stop is considered to be more a destination than origin with employees coming to the plant from other residential areas, and with a lesser volume of traffic going from surrounding residential areas to shopping or employment in the CBD or other activity centers. Significant park-and-ride facilities are provided, but little local feeder bus transfer is expected.

Key elements of the site context leading to selection of the stop for consideration include the presence of undeveloped land and fairly strong development activity in the area.



BUECHEL/GE STOP CONTEXT Fig. 6/5

In terms of the physical and environmental characteristics, the land is partially undeveloped and development is of widely divergent densities, street and infrastructure elements are unconnected and widely varying in quality, and there are some air and water pollution problems. Significant amenities are found in the vegetation of the area, but disamenities appear as well in built structures and infrastructure elements.

The residential based impact area is limited to one large census tract housing about 4,000 people in 1,500 housing units which have undergone a major transition from 1960-1970 of owner to renter occupancy. For example, in 1960, 81.5 percent of the units were owned, as compared with 29.8 percent in 1970. There were 26 units under building permits from 1970-1974, which is low but non-negligible. Vacant units increased substantially from 1960 to 1970 from 5.3 to 14.1 percent of all units.

Median income, family size, elderly population and child population were roughly the same as the city as a whole in 1970, while resident turnover was substantially more rapid. The area is basically a "good" area in terms of quality characteristics: unemployment is low, education levels are high, there is a low number of households in poverty, crime rates are moderately low, overcrowding is low, and the percent of population without autos is low. Only on the criteria of percent of income paid for rent does the area fare worse than the average city-dweller.

In terms of community enhancement, however, the impact on the 20,000 G.E. employees and

BUECHEL BANK ROAD LOOKING NORTH Fig. 6/6

PLANT ENTRANCE Fig. 6/7

other area employees is extremely important in comparison with the 4,000 area permanent residents. Other groups involved will probably include commercial retail businesses who may benefit from transit development, and others such as those at Newburg Road and Shepherdsville to the west who may lose competitive advantages by being remote from the stop.

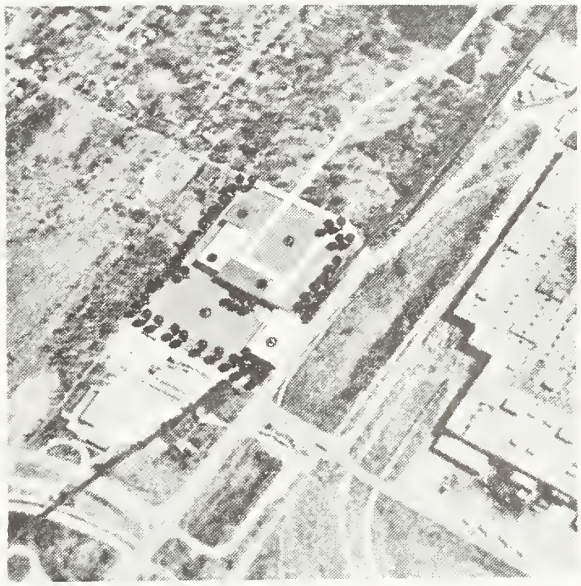
The degree of Value Capture Potential at the stop appears very good, as improved access to currently undeveloped land close to a strong employment base could result in significant appreciation in land values, and a potentially strong market for multi-family housing and related retail commercial outlets. Industrial land is also available in the area, but is expected to appreciate less and show, in general, less market response to transit development.

VALUE CAPTURE ALTERNATIVE #1

Alternative #1 illustrates the potential for constructing the exclusive bus-way route north of Buechel Bank Road along an existing undeveloped Right-of-Way extending southeast from Newburg Road. A transit stop is located west of the northern section of Buechel Bank Road where the busway is at grade. The route then proceeds southeast to Fern Creek Area or the proposed Outer Belt free-way. The transit stop is located far enough west to allow commercial development at the Buechel Bank Road intersection to serve the transit using population and residences to the north and east. Street patterns show connection of a through street to the east to facilitate transit access.

A minibus or PRT system is also suggested for distributing General Electric employees.

Land acquisition is limited to a 350,000 square foot parcel north and east of Buechel Bank Road, which is acquired for right-of-way, stop construction, parking and access. Fee simple title is indicated.

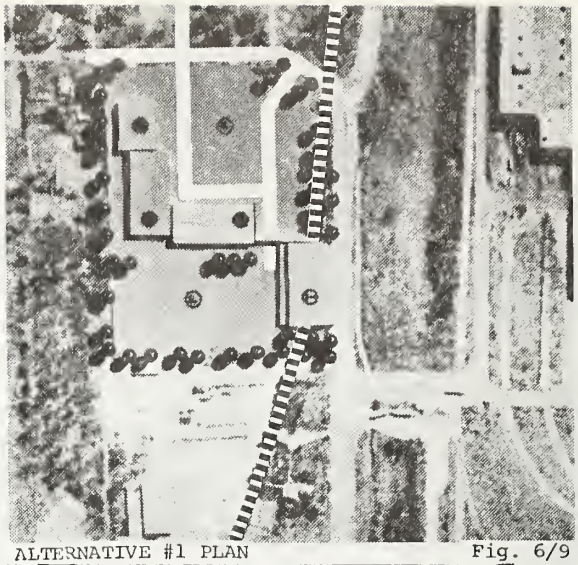


ALTERNATIVE #1 AERIAL VIEW Fig. 6/8

Difficulties in developing a tax mechanism, and the interrelated nature of transit and retail commercial development led to the selection of a Value Capture strategy of direct development and holding of owner-

ship of transit and commercial facilities. Revenues are realized through returns from operation of parking and retail facilities in addition to impacts on fare-box revenues. Possible additional revenues could be realized through operation of the proposed G.E. PRT or minibus system.

The illustrative development program includes:



ALTERNATIVE #1 PLAN Fig. 6/9

FACILITY				PARKING (P)			INSTRUMENT
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
(T)	Transit Stop	13,000	1	460	Grade	138,000	Develop/Hold
●	Neighborhood Commercial	48,000	1	240	Grade	72,000	Develop/Hold

VALUE CAPTURE ALTERNATIVE #2

Alternative #2 shifts the transit route to the south side of Buechel Bank Road with a transit stop at an elevated portion of the route immediately adjacent to the G E. Appliance Park Entrance Drive. The transit route then proceeds eastward just north of the Appliance Park properties. The stop itself provides separate entries north and south of the G.E. plant entrance road oriented respectively to the residential and employment based populations. Direct above grade connections are provided to most facilities.

A large land acquisition program of 1,090,000 square feet is proposed based on availability of land for purchase at reasonable cost, or extremely optimistic assumptions concerning condemnation and acquisition using future parking requirements and remnant theory as justification for taking.

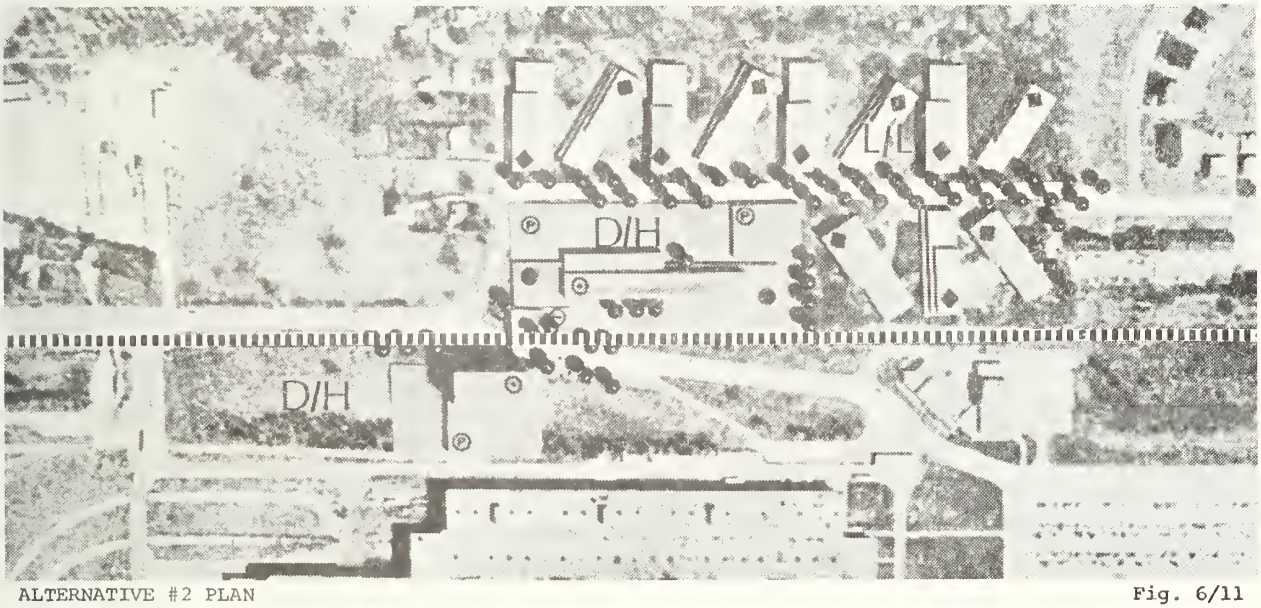
Techniques for Value Capture involve varied considerations for different parcels. A 280,000 square foot parcel including the transit stop, neighborhood commercial, sub-low rise office and parking is developed and held by the transit entity, as the facilities are physically and functionally inter-related. Land acquired north of the site in question is leased to a developer

ALTERNATIVE #2 AERIAL VIEW Fig. 6/10

for construction of multi-family housing. The parcel of 240,000 square feet south of Buechel Bank Road is sold after construction of the system, to G.E., or another developer for offic development, with the provision that the developer provide transit parking on the site. Housing and office development were excluded from develop/hold considerations due to scale and cost of development, and difficulties with use of transit funds for such remotely related projects.

The illustrative program includes the following uses. Note that cash flow analysis for this program follows the discussion of this stop.

	FACILITY			PARKING			INSTRUMENT
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
Ⓣ	Transit Stop	16,000	2	230 230	Struct Grade	80,500 69,000	Develop/Hold
	Neighborhood Commercial	110,000	2	440	Grade	132,000	Develop/Hold
⊙	Sub-Low-Rise Office	35,000	1	70 70	Struct Grade	24,500 21,000	Develop/Hold
⊙	Mid-Rise Office	120,000	8	440	Grade	132,000	Land/Sale
◆	Garden Apartments	396,000	2-3	495	Grade	148,500	Land/Lease



ALTERNATIVE #2 PLAN Fig. 6/11

COMMUNITY IMPACT EVALUATION

Socio-economic considerations at Buechel-G.E. are expected to show little change due to transit related development. The garden apartments shown in alternative #2 do represent a significant increase in area housing units and related population, but the profile of the new residents should be similar to present residents. Increased availability of transit, jobs, and retail outlets may shift activity patterns, and it is likely that these will provide an improvement due to increased opportunities, rather than disruption.

Environmental parameters at the site may be harder hit. Construction and paving of sites will reduce permeability and increase runoff, will have construction phase impacts, and will increase sewer and storm sewer loads with a potential negative effect on water quality. Noise and air pollution may be increased by system development and increased traffic on improved roads. Some trees, ground cover and amenities will be eliminated, but corresponding improvements in street and pedestrian paths and infrastructure elements should improve the area. Impacts are expected to be greater with the more extensive development illustrated in alternative #2.

Mobility and accessibility should be improved on both the local and area wide level. New, easily accessible commercial facilities and improved street patterns will help local residents. Park-and-ride and kiss-and-ride facilities can improve access of southeast Louisville residents to downtown Louisville and other activity centers. G.E. employees using combined transit/minibus facilities will have a valuable new travel option. In addition, stop related developments should provide

a significant draw and reinforcement for transit utilization. Again, greater impacts are expected for alternative #2.

The commercial activity provided at the site may be mainly redistributed from other southeast Louisville areas. Alternative #2 may have a similar effect on office and housing, both directly through transit related development and through induced changes. Environmental changes are mainly a net loss, while infrastructure improvements represent a net gain.

Of the above changes, the construction impacts on the environment are expected to be the only major short range effect. There is almost no nuisance effect or relocation. In the longer range, mobility improvements, environmental problems, infrastructure improvements, activity pattern changes and induced development are expected to be dominant.

For major interest groups, effects vary. Area employees generally receive substantial positive benefits. Area residents and businesses may be positively affected by mobility and infrastructure improvements and business opportunities while being negatively affected by environmental problems, and loss of competitive advantage at nearby commercial centers.

COMMUNITY IMPACT INDICATORS

		AREA MEAN	CITY MEAN	CHANGE DUE TO VCP ALT#1	ALT#2	ALT#3
PRIMARY INDICATORS	% Labor Force Unemployed	2.84	4.73	0	0	
	% Population, 25 or over High School Graduates	60.7	72.5	0	0	
	% Households in Poverty	11.8	16.7	0	L/B	
	% of Tract with Air Pollution Problems	50.0	56.0	H/W	HH/WW	
	Median Family Income	7639	7875	0	0	
	Rent as % of Income: $5,000-$9,999 Income	23.1	17.7	0	0	
	% of Units with 1.01 Persons per Room or More	5.9	8.7	0	0	
SECONDARY INDICATORS	% of Tract with Water Pollution Problems	30.0	13.5	H/W	HH/WW	
	% of Tract with Noise Pollution Problems	20.0	33.0	H/W	HH/WW	
	% of Tract without Pollution	60.0	24.6	L/W	LL/WW	
	% of Households with no Auto	12.3	10.8	0	0	
	Median School Years Completed, 1970	12.2	10.1	0	0	

NOTE: Numerical increase in some indicators denotes improvement, in other cases it indicates worsening of the current status. All indicators are referenced to the immediate stop context.

KEY:
- HH - significantly higher indicator value
- H - somewhat higher
- O - no change
- L - somewhat lower
- LL - significantly lower
- BB - significant improvement
- B - some improvement
- O - no change
- W - somewhat worse
- WW - significantly worse

COMMUNITY IMPACT INDICATORS

Fig. 6/12

FINANCIAL INVESTMENT ANALYSIS - VALUE CAPTURE ALTERNATIVE #1

```
********************
DEVEL HOLD G.F.1
DATA FOR THIS PART
********************

DEVEL.USES          3
NO.OF YEARS        25
NO.OF PARTNR        1
YEAR OF SALE       30

% VACANCY         5.00
CAP. RATE        9.80
MORT:VAL.RTO   100.00
MTG.TERM        25.00
% L.T. INTRS     6.00
% RECAP@SALE     2.00
% COMMISSION     5.00
$EQUITY PAID     0.00
LANDCOS.$/SF     1.40
KSF PAR.SIZE   350.00
$ DEMOL.COST     7.50

FOR EACH PARTNER:

PARTNER NO.         1
% SHARE        100.00
% INCOME TAX      0.00
% CAP.GAINS       0.00

DEVELOPMENT PROGRAM:

NEIGHBORD CO   48000.
GRADE PARKIN  210000.
PUBLIC INSTI   13000.
```

```
*****************************************************************
DEVEL HOLD G.E.1      ---   INCOME ANALYSIS    ( $ X 1000 )
*****************************************************************

PREV.EQUITY ASSUMED:        0.   COMPUTED EQUITY:          0.
TOTAL COST OF PROJ.:     2730.   COMPUTED MOR-VAL RTO.   100.00

PERIOD                  1       5      10      15      20      25

OPER INCOME         202.4   246.1   314.0   400.8   511.5   652.9

FIRST-AMORT          49.8    62.8    84.1   112.5   150.6   201.4
       INTRST       163.8   150.8   129.5   101.1    63.0    12.1

DEPRECIATION         70.8    62.2    52.9    45.0    38.2    32.5
TAXABLE INC         -32.2    33.1   131.7   254.8   410.3   608.3
TAX BENEFIT           0.0     0.0     0.0     0.0     0.0     0.0
PRETAX C.F.         -11.2    32.5   100.5   187.2   298.0   439.3
C.F.AFT TAX         -11.2    32.5   100.5   187.2   298.0   439.3

RCR (CASH)          0.000   0.000   0.000   0.000   0.000   0.000

RCR(CASH)
  PARTNER-     1      0.0     0.0     0.0     0.0     0.0     0.0

INC.-F&C
  PARTNER-     1    202.4   246.1   314.0   400.8   511.5   652.9
```

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 8.030 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 11.160 %

****

COMB. TOTAL CASH FLOW ($ X 1000)

****

PERIOD	1	5	10	15	20	25
DEVEL HOLD G.E.1	-11.2	32.5	100.5	187.2	298.0	439.3
ANNUAL CASH FLOW	-11.2	32.5	100.5	187.2	298.0	439.3
ACCUMULATED CASH	-11.2	50.6	410.3	1164.4	2421.8	4321.8

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	4322.	1900.	1633.	1410.	1222.	1063.

FINANCIAL INVESTMENT ANALYSIS - VALUE CAPTURE ALTERNATIVE #2

****

DEVEL HOLD G.E.2
DATA FOR THIS PART

****

DEVEL.USES	6
NO.OF YEARS	25
NO.OF PARTNR	1
YEAR OF SALE	30
% VACANCY	8.00
CAP. RATE	9.80
MORT:VAL.RTO	100.00
MTG.TERM	25.00
% L.T. INTRS	6.00
% RECAP&SALE	100.00
% COMMISSION	5.00
$EQUITY PAID	0.00
LANDCOS.$/SF	1.40
KSF PAR.SIZE	520.00
$ DEMOL.COST	0.00

FOR EACH PARTNER:

PARTNER NO.	1
% SHARE	100.00
% INCOME TAX	0.00
% CAP.GAINS	0.00

DEVELOPMENT PROGRAM:

PUBLIC INST1	16000.
GRADE PARKIN	366000.
STRUCTURED P	105000.
COMMUNITY CO	110000.
MID RISE OFF	120000.
SUBURBAN LOW	35000.

****

DEVEL HOLD G.E.2 --- INCOME ANALYSIS ($ X 1000)

****

PREV.EQUITY ASSUMED: 0. COMPUTED EQUITY: 0.

TOTAL COST OF PROJ.: 14591. COMPUTED MOR-VAL RTO. 100.00

PERIOD	1	5	10	15	20	25
OPER INCOME	709.7	862.7	1101.0	1405.2	1793.5	2289.0
FIRST-AMORT	266.0	335.8	449.3	601.3	804.7	1076.6
INTRST	875.5	805.7	692.1	540.1	336.8	64.6
DEPRECIATION	458.1	400.2	338.0	285.5	241.3	203.9
TAXABLE INC	-623.8	-343.1	70.9	579.6	1215.5	2020.5
TAX BENEFIT	0.0	0.0	0.0	0.0	0.0	0.0
PRETAX C.F.	-431.7	-278.7	-40.4	263.8	652.0	1147.5
C.F.AFT TAX	-431.7	-278.7	-40.4	263.8	652.0	1147.5
ROP (CASH)	0.000	0.000	0.000	0.000	0.000	0.000
ROR(CASH) PARTNER= 1	0.0	0.0	0.0	0.0	0.0	0.0
INC.-F&C PARTNER= 1	709.7	862.7	1101.0	1405.2	1793.5	2289.0

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 5.050 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 7.690 %

```
*********************
LAND LEASE G.E.2
DATA FOR THIS PART
*********************

DEVEL.USES          3
NO.OF YEARS        25
YEAR OF SALE       30

% VACANCY       10.00
CAP. RATE        9.80
% RECAP@SALE     2.00
% COMMISSION     5.00
% L.T. INTRS     9.00

LANDCOS.$/SF     1.40
KSF FAR.SIZE   570.00
$ DEMOL.COST     0.00

DEVELOPMENT PROGRAM:

STD.GARDEN A 396000.
GRADE PARKIN 292500.
MID RISE OFF 120000.
```

```
*****************************************************************
LAND LEASE G.E.2      --- LAND LEASE/SALE ANAL.($ X 1000)
*****************************************************************

TOTAL COST OF PROJ.:        798.  (INCL. ACQ.+ CLEAR. ONLY)
```

PERIOD	1	5	10	15	20	25
LEASE INCOME	-45.3	-45.3	-40.5	-34.5	-26.8	-16.9
REV AT SALE	175.1	175.1	223.5	285.2	364.0	464.6
TOT TAXES	0.0	0.0	0.0	0.0	0.0	0.0
EXPN OF SALE	8.8	8.8	11.2	14.3	18.2	23.2
PROC AFT TAX	165.5	166.3	212.3	270.9	345.8	441.3

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) -9.780 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 1.950 %

```
*****************************************************************
COMB. TOTAL CASH FLOW ($ X 1000)
*****************************************************************
```

PERIOD	1	5	10	15	20	25
DEVEL HOLD G.E.2	-431.7	-278.7	-40.4	263.8	652.0	1147.5
LAND LEASE G.E.2	-45.3	-45.3	-40.5	-34.5	-26.8	-16.9
ANNUAL CASH FLOW	-476.9	-324.0	-80.9	229.3	625.3	1130.6
ACCUMULATED CASH	-476.9	-2011.7	-2916.1	-2407.5	-95.4	4518.6

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

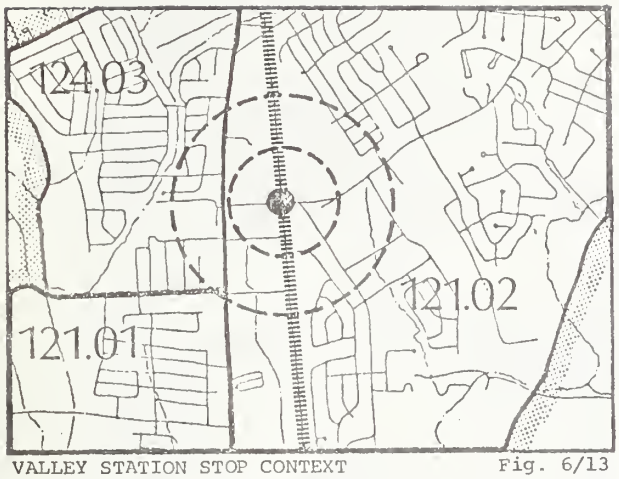
DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	4519.	318.	-91.	-417.	-678.	-885.

Valley Station

STOP CONTEXT

Valley Station was selected for study as an illustration of Value Capture potential in a mostly developed moderate income suburban residential area at the outlying end of a transit system. Valley Station possesses many unique features, but in general shares major characteristics of long commutes, highway congestion and park and ride potential as an origin rather than destination point with many other suburban locations.

Physically, Valley Station is located in far southwest Louisville more than 12 miles from the CBD. The area is close to proposed



VALLEY STATION STOP CONTEXT Fig. 6/13

Riverport industrial development, but isolated from most of Louisville by intervening hills. The area is proposed to be served by an exclusive busway system at grade linking Valley Station with the CBD, and connecting with the crosstown connector along the Watterson Expressway. Express bus service is already in effect in the area providing park-and-ride or Park-n-Tarc services. Capital investment in right-of-way and parking and station facilities, however, will be required to set the stage for Value Capture.

The area around the proposed stop at Valley Station Road and the Illinois Central Railway Line is primarily developed as low density single family residences. The area between the railway and Dixie Highway, however, offers a substantial quantity of sprawling discount commercial outlets, fast food emporiums and other commercial facilities. Flooding and water pollution are a major concern in the area which spreads from the Ohio River to the undeveloped hills to the southeast. Flood walls built to protect closer-in areas of Louisville have not yet been extended to Valley Station. Valley Station is an unincorporated area served only by Jefferson County government services. As a result, the number of public services is comparatively low. Residential areas are strongly oriented to home ownership, and though not extravagant are well maintained and jealously defended.

The Valley Station area is composed of three very large census tracts housing 32,816 people in 8,628 housing units. The population is extremely homegeneous with almost no significant variations between tracts. All tracts share stable, middle income families residing in dominantly single family homes (80% home owners), with large families (3.8 persons per household). The values of houses are almost exactly the same as the median for Louisville as a whole. There are very

RAILROAD R.O.W. LOOKING NORTH Fig. 6/14

few elderly (less than 3%) and many children under 18, (45%). Densities of 1.5 to 8 persons per acre are low.

In terms of quality, Valley Station is about the same as the overall city in terms of unemployment, education, and overcrowding. Valley Station has fewer noise and air pollution problems but significant water pollution problems and flooding. The crime rate is very low and poverty is low. Income is higher than average, but must be adjusted for large family sizes.

From 1960 to 1970 there was a slight increase in renters (from 15% to 17.4%) and a decrease in vacant units (only 2.5% in 1970). 56.5% of the population remained in the same residence from 1965-1970 indicating highly stable patterns. Building permit data indicates continuing new construction in the area.

VALLEY STATION ROAD LOOKING WEST Fig. 6/15

Information from community meetings in the Valley Station area indicates the following concerns:

Water pollution, flood control, sewage disposal.
Lack of parks and recreation opportunities.
Need for a southwestern community college.
Lack of medical facilities, social services.
Lack of community theater, restaurant.
Overdevelopment of discount commercial.
Protection of "integrity" of neighborhoods.
Dangerous railroad crossings.

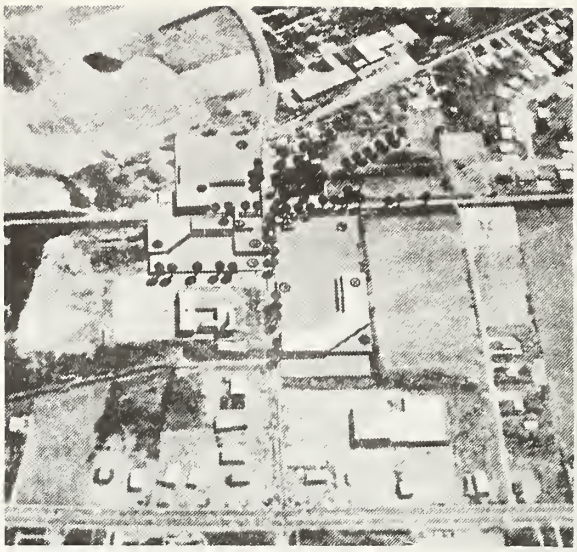
In addition to resident interests, any consideration of Valley Station must consider retail businesses and their employees, civic groups, the county government, the State Highway Department, the junior college district and other service entities, and the railway company.

Economic considerations in the area are difficult to ascertain as Louisville's strongest growth is towards the east and south of downtown.

Market potential for the area is uncertain, but discount commercial seems clearly to be already over-developed. General increases of moderate income residential development suggest slow but steady growth of retail markets and professional office space, which is currently very limited. Future institutional uses may include community college, health or social service facilities, all of which are under represented currently in the area.

VALUE CAPTURE ALTERNATIVE #1

As opposed to most other stops, Valley Station begins with an optimistic rather than conservative Value Capture strategy. Beginning with a transit stop the exclusive busway sharing the railway right-of-way, 485,000 square feet of land are shown to be acquired on both sides of the railway and both sides of Valley Station Road. Key elements of the acquisition strategy include inter-governmental cooperation with the State Highway Department which is projected to play a major role in constructing a grade separated crossing for Valley Station Road over the railway and busway, acquisition for present and future parking, and direct purchase at current market rates. The potential exists



ALTERNATIVE #1 AERIAL VIEW Fig. 6/16

also for land acquisition for future park or institutional development southwest of Valley Station Road in conjunction with the county government. As much as 520,000 square feet of land is suitable for consideration for these purposes. Part of the justification for the major land acquisition effort is the additional goal of achieving more rational and higher quality land uses adjacent to the stop.

Value recapture is suggested through the develop/hold technique due to difficulties in defining or justifying a tax district, and the need for a high degree of development control. Difficulties may be encountered in using transit funds for such a large program of commercial and office development, but can provide community design benefits if accomplished.

ALTERNATIVE #1 PLAN Fig. 6/17

The illustrative facilities program is oriented towards providing community commercial facilities in a coordinated, context of improved quality to supplement rather than compete with existing discount commercial facilities. Limited low-rise professional office space also seems to be warranted, and supportive of overall development goals and transit utilization. The program used in cash flow analysis following this discussion includes:

	FACILITY			PARKING			TECHNIQUE
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
Ⓣ	Transit Stop	8,000	1	280	Grade	84,000	Develop/Hold
●	Community Commercial	141,800	1-2	475	Grade	142,500	Develop/Hold
⊙	Sub-Low Rise Office	36,000	1(Above commer)	144	Grade	43,200	Develop/Hold

VALUE CAPTURE ALTERNATIVE #2

Alternative #2 represents a more conservative scheme, both in scope of land acquisition and facility program. 392,500 square feet of land, all directly adjacent to Valley Station Road and transit/railway right-of-way, are considered for acquisition by purchase or condemnation for stop, parking, future parking, remnant theory, or joint acquisition for highway overpass as mentioned in option #1.

Three of the resulting parcels are then developed by the transit entity as the transit stop, parking, and commercial facilities. The fourth parcel is held un-

ALTERNATIVE #2 AERIAL VIEW Fig. 6/18

ALTERNATIVE #2 PLAN Fig. 6/19

developed for a period of time, then sold with such restrictions as necessary to protect the public interest. Some demolition is required, but is basically limited to blighting or dangerous structures. The illustrative development program deletes office development and provides smaller scale commercial development creating fewer problems in terms of legal or financial considerations but also achieving lesser results. The program includes:

	FACILITY			PARKING			TECHNIQUE
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
	Transit Stop	8,000	1	280	Grade	84,000	Develop/Hold
	Neighborhood Commercial	46,000	1	240	Grade	72,000	Develop/Hold
	Hold Land	105,000	-	-	-	-	Hold/Sell

VALUE CAPTURE ALTERNATIVE #3

Alternative #3 was incorporated in this research as a baseline or control situation for Louisville. It includes a modest transit stop facility and kiss-and-ride parking lot for 125 cars. No other development uses are included, and thus this represents a typical "transit stop" without any related development.

Only one parcel of 50,000 square feet would be acquired by the transit development entity. This would be held by the entity for the 25 year project period. Some demolition will be necessary, but overall this scheme, when compared with alternatives #1 and #2 provides only minimal disruption of the commercial community in which it is located. The development program is as shown; note that no site designs are shown.

	FACILITY			PARKING			TECHNIQUE
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
T	Transit Stop	5,000	1	125	Grade	45,000	Develop/Hold

COMMUNITY IMPACT EVALUATION:

No population effects are expected from application of Value Capture at Valley Station, and, in fact, no measurable changes are expected on any indicator variables used in this study. This does not mean, however, that there will be no community benefits. In terms of social/economic effects, for example, both alternatives are expected to shift activity patterns in terms of providing a meeting ground for residents from other communities expected to use park-and-ride facilities, and in terms of different quality of options for retail shopping. In addition, there is the potential for coordinated development of needed highway grade separation at the railway and busway.

Improvements in environmental characteristics are expected due to removal of blighting structures and improvement of street and pedestrian paths. No change in natural environmental parameters as there is little measurable increase in impermeable ground surface, sewer loads, or traffic densities.

The utilization of park-and-ride and kiss-and-ride facilities is difficult to predict, but they can only improve access and mobility. At the same time, upgrading of the surrounding area can only have a positive, not negative, effect on transit utilization. Grade separation at the railway, and potential for centralized provision of services should have a positive effect on local mobility.

The isolation of Valley Station indicates that the previously mentioned gains are almost entirely net gains rather than redistribution, though the location of commercial facilities may just mean moving them from another area within Valley Station or along Dixie Highway.

The only serious problems are short range: congestion due to construction, and relocation of existing businesses. Positive effects should be increasingly clear in the long run.

At Valley Station, more than any other situation studied, the application of Value Capture can be judged to have positive community enhancement effects. Only for retail businesses, where some may lose and some may gain, is there a mixed result. For residents, there is no intrusion on or disruption of neighborhoods, and there are clear benefits in safety, mobility, amenities, services and activity options.

		AREA MEAN	CITY MEAN	CHANGE DUE TO VCP ALT#1	ALT#2	ALT#3
PRIMARY INDICATORS	% Labor Force Unemployed	4.44	4.73	0	0	
	% Population, 25 or over High School Graduates	43.6	42.5	0	0	
	% Households in Poverty	7.27	16.7	0	0	
	% of Tract with Air Pollution Problems	16.7	56.0	0	0	
	Median Family Income	9668	7875	0	0	
	Rent as % of Income: $5,000-$9,999 Income	19.7	17.7	0	0	
	% of Units with 1.01 Persons per Room or More	8.8	8.7	0	0	
SECONDARY INDICATORS	% of Tract with Water Pollution Problems	76.7	13.5	0	0	
	% of Tract with Noise Pollution Problems	11.7	33.0	0	0	
	% of Tract without Pollution	16.7	24.6	0	0	
	% of Households with no Auto	3.77	23.87	0	0	
	Median School Years Completed, 1970	11.3	10.8	0	0	

NOTE: Numerical increase in some indicators denotes improvement, in other cases it indicates worsening of the current status. All indicators are referenced to the immediate stop context.

KEY:
HH - significantly higher indicator value
H - somewhat higher
O - no change
L - somewhat lower
LL - significantly lower

BB - significant improvement
B - some improvement
O - no change
W - somewhat worse
WW - significantly worse

COMMUNITY IMPACT INDICATORS Fig. 6/20

FINANCIAL INVESTMENT ANALYSIS -
VALUE CAPTURE ALTERNATIVE #1

****

DEVEL HOLD V.S.1
DATA FOR THIS PART
****

DEVEL.USES	5
NO.OF YEARS	25
NO.OF PARTNR	1
YEAR OF SALE	30
% VACANCY	8.00
CAP. RATE	9.80
MORT:VAL.RTO	100.00
MTG.TERM	25.00
% L.T. INTRS	6.00
% RECAP@SALE	100.00
% COMMISSION	5.00
$EQUITY PAID	0.00
LANDCOS.$/SF	1.30
KSF PAR.SIZE	585.00
$ DEMOL.COST	53.00

FOR EACH PARTNER:

PARTNER NO.	1
% SHARE	100.00
% INCOME TAX	0.00
% CAP.GAINS	0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI	8000.
GRADE PARKIN	238200.
STRUCTURED P	367500.
SUBURBAN LOW	36000.
COMMUNITY CO	141800.

****

DEVEL HOLD V.S.I --- INCOME ANALYSIS ($ X 1000)

****

PREV.EQUITY ASSUMED: 0. COMPUTED EQUITY: 0.

TOTAL COST OF PROJ.: 8561. COMPUTED MOR-VAL RTO. 100.00

PERIOD	1	5	10	15	20	25
OPER INCOME	502.1	610.3	778.9	994.1	1268.7	1619.2
FIRST-AMORT	156.0	197.0	263.6	352.8	472.1	631.6
INTRST	513.7	472.7	406.1	316.9	197.6	37.9
DEPRECIATION	245.6	215.7	183.5	156.0	132.8	113.0
TAXABLE INC	-257.2	-78.2	189.3	521.1	938.3	1468.3
TAX BENEFIT	0.0	0.0	0.0	0.0	0.0	0.0
PRETAX C.F.	-167.6	-59.4	109.2	324.3	599.0	949.5
C.F.AFT TAX	-167.6	-59.4	109.2	324.3	599.0	949.5
ROR (CASH)	0.000	0.000	0.000	0.000	0.000	0.000
ROR(CASH) PARTNER- 1	0.0	0.0	0.0	0.0	0.0	0.0
INC.-F&C PARTNER- 1	502.1	610.3	778.9	994.1	1268.7	1619.2

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 6.220 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 9.090 %

****

COMB. TOTAL CASH FLOW ($ X 1000)

****

PERIOD	1	5	10	15	20	25
DEVEL HOLD V.S.	-167.6	-59.4	109.2	324.3	599.0	949.5
ANNUAL CASH FLOW	-167.6	-59.4	109.2	324.3	599.0	949.5
ACCUMULATED CASH	-167.6	-574.3	-382.1	788.3	3207.2	7219.4

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	7219.	2641.	2154.	1751.	1416.	1138.

FINANCIAL INVESTMENT ANALYSIS -
VALUE CAPTURE ALTERNATIVE #2

****

DEVEL HOLD V.S.2
DATA FOR THIS PART

****

DEVEL.USES	3
NO.OF YEARS	25
NO.OF PARTNR	1
YEAR OF SALE	30
% VACANCY	5.00
CAP. RATE	9.80
MORT:VAL.RTO	100.00
MTG.TERM	25.00
% L.T. INTRS	6.00
% RECAPRSALE	100.00
% COMMISSION	5.00
$EQUITY PAID	0.00
LANDCOS.$/SF	1.30
KSF PAR.SIZE	287.50
$ DEMOL.COST	43.00

FOR EACH PARTNER:

PARTNER NO.	1
% SHARE	100.00
% INCOME TAX	0.00
% CAP.GAINS	0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI	8000.
GRADE PARKIN	156000.
NEIGHBORD CO	460000.

****

DEVEL HOLD V.S.2 --- INCOME ANALYSIS ($ X 1000)

****

PREV.EQUITY ASSUMED: 0. COMPUTED EQUITY: 0.

TOTAL COST OF PROJ.: 2291. COMPUTED MOR-VAL RTO. 100.00

PERIOD	1	5	10	15	20	25
OPER INCOME	178.1	216.5	276.3	352.7	450.1	574.4
FIRST-AMORT	41.8	52.7	70.5	94.4	126.3	169.0
INTRST	137.5	126.5	108.7	84.8	52.9	10.1
DEPPECIATION	59.1	51.9	44.2	37.6	32.0	27.3
TAXABLE INC	-18.4	38.1	123.5	230.2	365.2	537.0
TAX BENEFIT	0.0	0.0	0.0	0.0	0.0	0.0
PRETAX C.F.	-1.1	37.3	97.1	173.4	270.9	395.2
C.F.AFT TAX	-1.1	37.3	97.1	173.4	270.9	395.2
ROR (CASH)	0.000	0.000	0.000	0.000	0.000	0.000
ROR(CASH) PARTNER- 1	0.0	0.0	0.0	0.0	0.0	0.0
INC.-F&C PARTNER- 1	178.1	216.5	276.3	352.7	450.1	574.4

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 8.460 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 11.630 %

****

LAND SALE V.S.2
DATA FOR THIS PART

****

DEVEL.USES	1
NO.OF YEARS	25
YEAR OF SALE	10
% VACANCY	5.00
CAP. RATE	9.80
% RECAPRSALE	2.00
% COMMISSION	5.00
% L.T. INTRS	9.00
LANDCOS.$/SF	1.25
KSF PAR.SIZE	80.00
$ DEMOL.COST	0.00

DEVELOPMENT PROGRAM:

NEIGHBORD CO	20000.

****

LAND SALE V.S.2 --- LAND LEASE/SALE ANAL.($ X 1000)

****

TOTAL COST OF PROJ.: 100. (INCL. ACQ.+ CLEAR. ONLY)

PERIOD	1	5	10	15	20	25
LEASE INCOME	18.9	18.9	26.3	35.7	47.7	63.0
REV AT SALE	272.5	272.5	347.8	443.9	566.6	723.1
TOT TAXES	0.0	0.0	0.0	0.0	0.0	0.0
EXPN OF SALE	13.6	13.6	17.4	22.2	28.3	36.2
PROC AFT TAX	258.8	258.9	330.5	421.8	538.3	687.0

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 33.820 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 30.660 %

****

COMB. TOTAL CASH FLOW ($ X 1000)

****

PERIOD	1	5	10	15	20	25
DEVEL HOLD V.S.	-1.1	37.3	97.1	173.4	270.9	395.2
LAND SALE V.S.2	0.0	0.0	330.5	0.0	0.0	0.0
ANNUAL CASH FLOW	-1.1	37.3	427.6	173.4	270.9	395.2
ACCUMULATED CASH	-1.1	88.1	778.6	1485.7	2635.7	4351.0

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	4351.	2014.	1751.	1529.	1341.	1181.

FINANCIAL INVESTMENT ANALYSIS -
VALUE CAPTURE ALTERNATIVE #3

****

DEVEL HOLD V.S.3
DATA FOR THIS PART

****

DEVEL.USES	2
NO.OF YEARS	25
NO.OF PARTNR	1
YEAR OF SALE	30
% VACANCY	8.00
CAP. RATE	9.80
MORT:VAL.RTO	100.00
MTG.TERM	25.00
% L.T. INTRS	6.00
% RECAP@SALE	100.00
% COMMISSION	5.00
$EQUITY PAID	0.00
LANDCOS.$/SF	1.30
KSF PAR.SIZE	55.00
$ DEMOL.COST	10.00

FOR EACH PARTNER:

PARTNER NO.	1
% SHARE	100.00
% INCOME TAX	0.00
% CAP.GAINS	0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI	5000.
GRADE PARKIN	45000.

****

DEVEL HOLD V.S.3 --- INCOME ANALYSIS ($ X 1000)

****

PREV.EQUITY ASSUMED: 0. COMPUTED EQUITY: 0.

TOTAL COST OF PROJ.: 365. COMPUTED MOR-VAL RTO. 100.00

PERIOD	1	5	10	15	20	25
OPER INCOME	14.7	17.9	22.8	29.2	37.2	47.5
FIRST-AMORT	6.7	8.4	11.3	15.1	20.2	27.0
INTRST	21.9	20.2	17.3	13.5	8.4	1.6
DEPRECIATION	9.3	8.2	6.9	5.8	4.9	4.2
TAXABLE INC	-16.5	-10.4	-1.4	9.8	23.9	41.7
TAX BENEFIT	0.0	0.0	0.0	0.0	0.0	0.0
PRETAX C.F.	-13.9	-10.7	-5.7	0.6	8.6	18.9
C.F.AFT TAX	-13.9	-10.7	-5.7	0.6	8.6	18.9
ROR (CASH)	0.000	0.000	0.000	0.000	0.000	0.000
ROR(CASH) PARTNER- 1	0.0	0.0	0.0	0.0	0.0	0.0
INC.-F&C PARTNER- 1	14.7	17.9	22.8	29.2	37.2	47.5

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 4.070 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 6.480 %

****

COMB. TOTAL CASH FLOW ($ X 1000)

****

PERIOD	1	5	10	15	20	25
DEVEL HOLD V.S.	-13.9	-10.7	-5.7	0.6	8.6	18.9
ANNUAL CASH FLOW	-13.9	-10.7	-5.7	0.6	8.6	18.9
ACCUMULATED CASH	-13.9	-61.6	-100.7	-111.1	-84.8	-11.9

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	-12.	-55.	-58.	-60.	-62.	-62.

Watterson

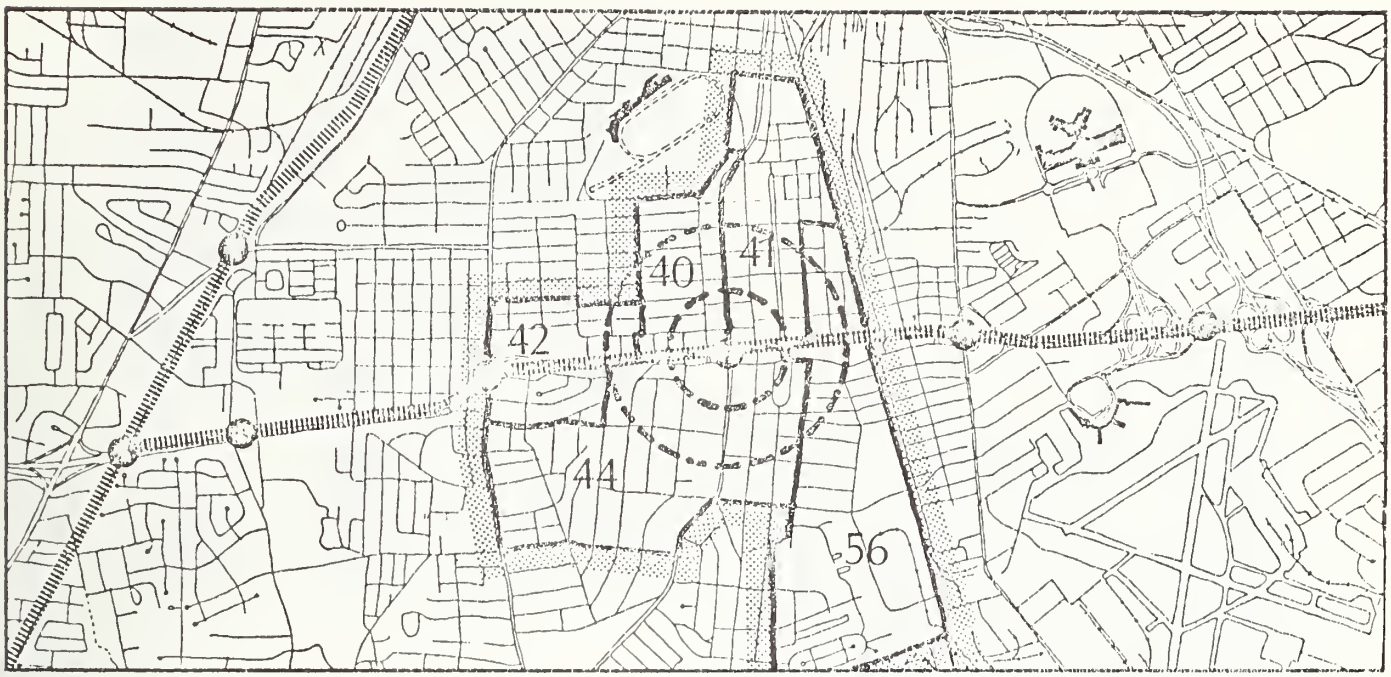
STOP CONTEXT

The Watterson and Southern stop is located in South Central Louisville where Southern Parkway, a major north-south connector is crossed by the Watterson Expressway, paralleled by an assumed bus lane. The stop was selected for detailed consideration because it exemplified the constraints of a fully developed stable residential area as well as a major modal interchange point.

Transit characteristics of the Watterson and Southern stop include the existing expressway, which is elevated through the immediate area; an assumed busway parallel to the expressway, and elevated above cross streets; and surface street bus service linking the CBD with a large residential transit shed south of the expressway. Limited park-and-ride or kiss-and-ride opportunities are envisioned for this stop as well as the interchange services.

The physical environment surrounding the stop includes primarily older residential units, many on very large lots, interspersed with mature trees. There is little or no undeveloped land. Almost all negative natural environmental problems are associated with the expressway; mainly air pollution and noise. Streets and other infrastructure elements are fully developed and in reasonably good condition.

The population surrounding the intersection of Southern Parkway and the Watterson Expressway compares very closely with average values of the City of Louisville as a whole. The area contains 5 census tracts housing 16,602 people in 6,624 housing units. The number of persons per unit is 2.5 as opposed to 2.62 for Louisville as a whole. Elderly persons comprise 12.8 percent of the population while 28 percent are under 18 years old. Corresponding figures for the City of Lousiville are 12.0 percent and 34.5 percent respectively. Of the existing housing units, 55 percent are owned, 41 percent rented and 4 percent vacant. For Louisville the figures are 56.8, 22.7 and 5 percent respectively. Only six building permits were issued from 1970-1974. Stability of residents as measured by the percent of population in the same residence from 1965-1970 was the same as for the city as a whole, around 53 percent. The value of homes is increasingly lower than the city average, while rents are almost exactly equal. There are almost no minority residents in the area.



WATTERSON AND SOUTHERN STOP CONTEXT Fig. 6/21

Not only do the above characteristics parallel city averages, but they are very consistent across census tracts within the area.

In terms of environmental quality, the Watterson/Southern Parkway area has a low percent poverty, somewhat low overcrowding rates, moderately low crime rates, no water pollution but high noise pollution, and relatively low education levels. On other quality indicators, the area is comparable with overall city averages.

Area residents are expected to comprise the major interest group affected by development related to transit and they may be expected to value preservation of current population groups and neighborhood amenities. Organized civic groups representing resident interests will likely be involved. The State Highway Department is currently concerned with upgrading the Watterson Expressway. Users of both existing bus systems and highways will be affected. Retail commercial and office businesses may be interested in development options related to transportation changes. There is a great deal of uncertainty as to market potential since there is currently only a very limited scattering of retail, office, and new housing development in an area that is

SOUTHERN PARKWAY LOOKING NORTH Fig. 6/22

SOUTHERN HEIGHTS AVENUE Fig. 6/23

dominantly older single family residential. Some construction of new garden apartments in the area suggests a possible trend to higher density residential use in the future, if it is reasonably compatible with current uses in terms of population mix and physical appearance. Slow increases in office space suggest potential market for low-rise professional or related offices.

A key factor for the market will be the outcome of future vehicular improvements on the Watterson. The degree to which transit would take the place of such improvements would have significant impact on the market for this location.

VALUE CAPTURE ALTERNATIVE #1

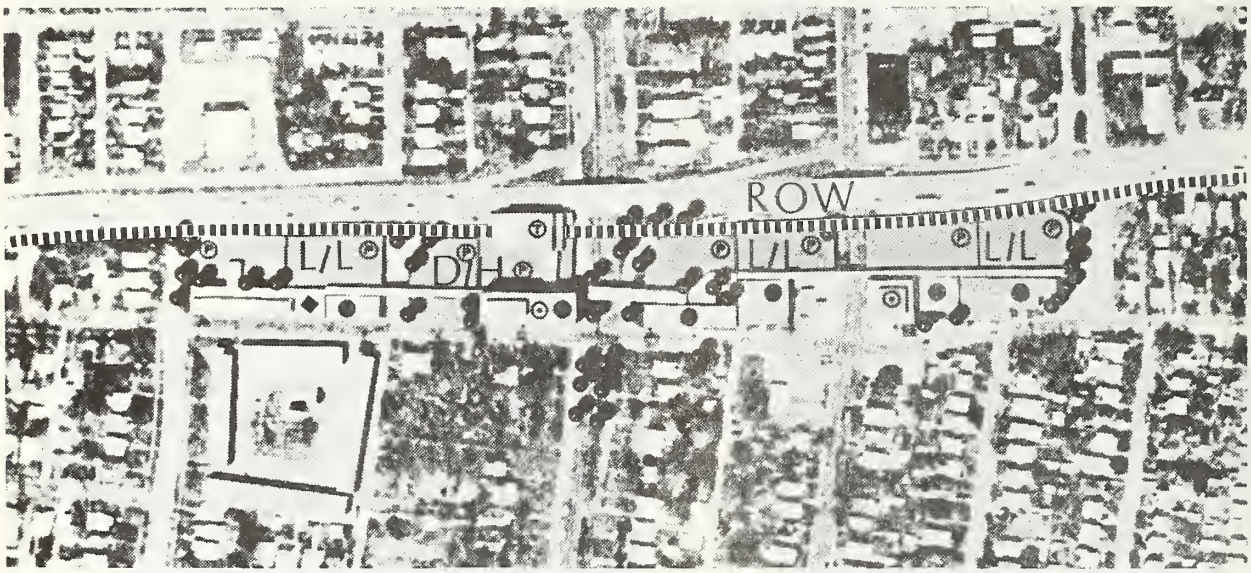
Alternative #1 suggests the possibility of developing the exclusive busway route south of the Watterson Expressway, with strip development along the transit right-of-way. An area of 407,750 square feet of land, comprising four blocks between the expressway and Southern Heights Avenue is indicated for acquisition through purchase or condemnation for right-of-way, station facilities, parking and protective easements. The stop itself is shown at the west side of Southern Parkway between the expressway and Southern Heights Avenue, with local bus service at the lower level, and exclusive busway access at the second level.

The transit stop, a related 6 story office building, and related parking are suggested for development by the transit entity itself, using the entire block just west of Southern Parkway. The other three blocks

ALTERNATIVE #1 AERIAL VIEW Fig. 6/24

are illustrated to be leased to private developers for construction of local retail commercial, office or housing development. Clear delineation of parcels and blocks to be leased suggests the possibility of several independent developers leasing separate parcels and constructing independent small scale facilities. A second level pedestrian connection and 2 levels of parking adjacent to the expressway and busway may be potentially beneficial to developers and the transit entity.

The detailed program used in cash flow analysis and illustrated in the model includes:



ALTERNATIVE #1 PLAN Fig. 6/25

	Facility			Parking			Technique
	Type	Square feet	Stories	Spaces	Type	Square feet	
⊙	Mid-Rise Office	65,000	6	120 140	Grade Structured	36,000 49,000	Develop/Hold
Ⓣ	Transit Stop	16,000	2	80	Grade	24,000	Develop/Hold
⊙	Low-Rise Office	50,000	5	200	Structured	70,000	Land/Lease
●	Neighborhood Commercial	61,000	1-2	240	Grade	72,000	Land/Lease
◆	Garden Apartments	43,000	2-3	60	Grade	18,000	Land/Lease
	Transit R.O.W.	50,000	-	-	-	-	Develop/Hold

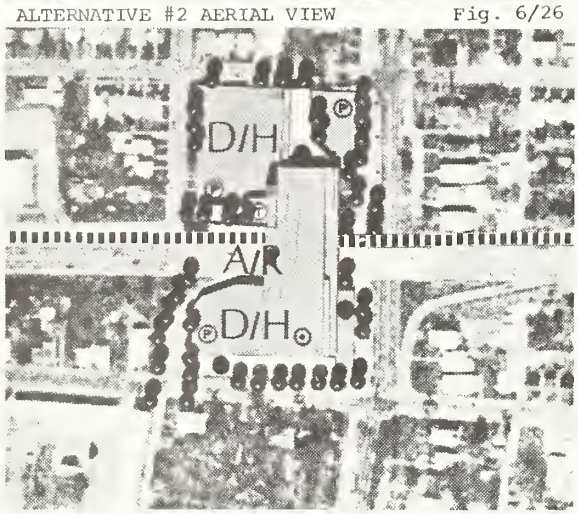
VALUE CAPTURE ALTERNATIVE #2

Alternative #2 differs substantially from the first option in terms of extent of land control and technique for Value Capture. Program, design and transit system variations are significantly less important. The exclusive busway route, for example, is illustrated north of the Watterson Expressway, with development occurring both north and south of the highway and using air rights above the highway.

The total land area to be acquired comprises 210,900 square feet on two blocks north and south of the expressway west of Southern Parkway. An additional 29,600 square feet of air rights are acquired from the State Highway Department. Land taking is specifically for the purpose of developing the transit system, stop, parking, and related facilities needed for effective operation of the transit system. The stop itself is located north of the expressway with access at street level and at the second level to the exclusive busway route.

All facilities are suggested for direct development by the transit entity to serve public purposes related to the successful operation of the transit stop. Office space may not be related directly to transit use, but requires no excess or supplemental condemnation. Difficulties may be involved in uses of entity funds for this type of development. The illustrative program includes:

ALTERNATIVE #2 AERIAL VIEW Fig. 6/26



ALTERNATIVE #2 PLAN Fig. 6/27

	Facility			Parking			Technique
	Type	Square feet	Stories	Spaces	Type	Square feet	
	Transit Stop	12,500	2	82	Grade	24,600	Develop/Hold
	Neighborhood Commercial	68,000	1-2	300	Grade	90,000	Develop/Hold
	Low-Rise Office	70,000 -	3 -	224 56	Structured Grade	78,400 16,900	Develop/Hold Develop/Hold

COMMUNITY IMPACT EVALUATION

Some demolition and relocation are projected for both Value Capture alternatives amounting to just over 30 housing units. In alternative #1 these units are replaced by new construction. Some disruption of activity patterns is expected, but should be minimal due to restriction of new development to areas along the expressway. Some additions to activity patterns are encouraged by changed transit utilization and provision of new facilities. Some new employment for area or city residents may be provided under either alternative.

The existing high level of development indicates minimal natural environmental impacts from new development. Concentration of development along expressway may provide noise screening of freeway, as well as minimizing destruction of trees and other area amenities. Traffic may be increased by new facilities but decreased by transit improvements, resulting in minimal net changes in automobile related pollution under both alternatives.

The strong potential of the stop to facilitate crosstown transfer will be emphasized by related development and should provide net improvement. Air rights development over the Watterson Expressway in Alternative #2 may have some impact on expressway users.

Residential and business effects should be redistributed mainly within the primary or adjacent areas. Alternative #2 results in a net loss of housing units for the area. Mobility aspects represent a net gain, while environmental effects may be mixed.

Construction nuisances of noise, congestion and relocation are major short range impacts. Mobility considerations, activity patterns, potential induced development, and net housing loss in alternative #2 are expected longer range impacts.

Community impacts as measured by indicators are expected to be negligible. Particular effects on area residents including relocation, new housing, noise, pedestrian environment, vegetation, and activity patterns are expected to be both positive and negative with mixed individual perceptions. Mobility improvements are positive for both local area residents and those throughout the Southern Parkway transit-shed. Businesses should be positively affected through new opportunities for development related to transit, though businesses remote from the stop may feel some mild adverse affects.

		AREA MEAN	CITY MEAN	CHANGE DUE TO VCP ALT#1	ALT#2	ALT#3
PRIMARY INDICATORS	% Labor Force Unemployed	3.57	4.73	L/B	L/B	
	% Population, 25 or over High School Graduates	36.4	42.5	0	0	
	% Households in Poverty	11.6	16.7	0	0	
	% of Tract with Air Pollution Problems	44.0	56.0	0	0	
	Median Family Income	7179	7875	H/B	H/B	
	Rent as % of Income: $5,000-$9,999 Income	16.5	17.7	0	H/W	
	% of Units with 1.01 Persons per Room or More	6.1	8.7	0	0	
SECONDARY INDICATORS	% of Tract with Water Pollution Problems	0.0	13.5	0	0	
	% of Tract with Noise Pollution Problems	74.0	33.0	L/B	L/B	
	% of Tract without Pollution	24.0	24.6	H/B	H/B	
	% of Households with no Auto	19.36	23.87	0	0	
	Median School Years Completed, 1970	10.2	10.8	0	0	

NOTE: Numerical increase in some indicators denotes improvement, in other cases it indicates worsening of the current status. All indicators are referenced to the immediate stop context.

KEY:
- HH - significantly higher indicator value
- H - somewhat higher
- O - no change
- L - somewhat lower
- LL - significantly lower
- BB - significant improvement
- B - some improvement
- O - no change
- W - somewhat worse
- WW - significantly worse

COMMUNITY IMPACT INDICATORS Fig. 6/28

FINANCIAL INVESTMENT ANALYSIS -
VALUE CAPTURE ALTERNATIVE #1

****

DEVEL HOLD WTTN.1
DATA FOR THIS PART

****

DEVEL.USES	4
NO.OF YEARS	25
NO.OF PARTNR	1
YEAR OF SALE	30
% VACANCY	5.00
CAP. RATE	9.80
MORT:VAL.RTO	100.00
MTG.TERM	25.00
% L.T. INTRS	6.00
% RECAP@SALE	100.00
% COMMISSION	5.00
$EQUITY PAID	0.00
LANDCOS.$/SF	4.00
KSF PAR.SIZE	80.00
$ DEMOL.COST	52.00

FOR EACH PARTNER:

PARTNER NO.	1
% SHARE	100.00
% INCOME TAX	0.00
% CAP.GAINS	0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI	16000.
STRUCTURED P	49000.
GRADE PARKIN	60000.
MID RISE OFF	65000.

****

DEVEL HOLD WTTN.1 --- INCOME ANALYSIS ($ X 1000)

****

PREV.EQUITY ASSUMED: 0. COMPUTED EQUITY: 0.

TOTAL COST OF PROJ.: 4882. COMPUTED MOR-VAL RTO. 100.00

PERIOD	1	5	10	15	20	25
OPER INCOME	188.4	229.1	292.3	373.1	476.2	607.7
FIRST-AMORT	89.0	112.4	150.4	201.2	269.3	360.2
INTRST	292.9	269.6	231.6	180.7	112.7	21.6
DEPRECIATION	152.3	132.7	111.7	94.0	79.2	66.6
TAXABLE INC	-256.8	-173.2	-50.9	98.3	284.3	519.5
TAX BENEFIT	0.0	0.0	0.0	0.0	0.0	0.0
PRETAX C.F.	-193.5	-152.9	-89.6	-8.8	94.2	225.8
C.F.AFT TAX	-193.5	-152.9	-89.6	-8.8	94.2	225.8
ROR (CASH)	0.000	0.000	0.000	0.000	0.000	0.000
ROR(CASH) PARTNER- 1	0.0	0.0	0.0	0.0	0.0	0.0
INC.-F&C PARTNER- 1	188.4	229.1	292.3	373.1	476.2	607.7

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 3.870 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 6.230 %

****

LAND LEASE WTTN.1
DATA FOR THIS PART

****

DEVEL.USES	5
NO.OF YEARS	25
YEAR OF SALE	30
% VACANCY	5.00
CAP. RATE	9.80
% RECAP@SALE	2.00
% COMMISSION	5.00
% L.T. INTRS	9.00
LANDCOS.$/SF	4.00
KSF PAR.SIZE	220.00
$ DEMOL.COST	0.00

DEVELOPMENT PROGRAM:

LOW RISE OFF	50000.
NEIGHBORD CO	61000.
STD.GARDEN A	43000.
STRUCTURED P	70000.
GRADE PARKIN	72000.

****

LAND LEASE WTTN.1 --- LAND LEASE/SALE ANAL.($ X 1000)

****

TOTAL COST OF PROJ.: 880. (INCL. ACQ.+ CLEAR. ONLY)

PERIOD	1	5	10	15	20	25
LEASE INCOME	0.7	0.7	19.9	44.5	75.8	115.7
REV AT SALE	709.9	709.9	906.0	1156.3	1475.8	1883.5
TOT TAXES	0.0	0.0	0.0	0.0	0.0	0.0
EXPN OF SALE	35.5	35.5	45.3	57.8	73.8	94.2
PROC AFT TAX	673.5	674.4	860.7	1098.5	1402.0	1789.3

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 7.950 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 11.680 %

****

COMB. TOTAL CASH FLOW ($ X 1000)

****

PERIOD	1	5	10	15	20	25
DEVEL HOLD WTTN.	-193.5	-152.9	-89.6	-8.8	94.2	225.8
LAND LEASE WTTN.	0.7	0.7	19.9	44.5	75.8	115.7
ANNUAL CASH FLOW	-192.8	-152.2	-69.7	35.6	170.0	341.5
ACCUMULATED CASH	-192.8	-864.8	-1345.8	-1337.0	-703.1	728.7

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	729.	-379.	-478.	-555.	-613.	-657.

FINANCIAL INVESTMENT ANALYSIS -
VALUE CAPTURE ALTERNATIVE #2

****

DEVEL HOLD WTTN.2
DATA FOR THIS PART

****

DEVEL.USES	5
NO.OF YEARS	25
NO.OF PARTNR	1
YEAR OF SALE	30
% VACANCY	8.00
CAP. RATE	9.80
MORT:VAL.RTO	100.00
MTG.TERM	25.00
% L.T. INTRS	6.00
% RECAP@SALE	100.00
% COMMISSION	5.00
$EQUITY PAID	0.00
LANDCOS.$/SF	4.00
KSF PAR.SIZE	210.00
$ DEMOL.COST	48.00

FOR EACH PARTNER:

PARTNER NO.	1
% SHARE	100.00
% INCOME TAX	0.00
% CAP.GAINS	0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI	12500.
STRUCTURED P	78400.
GRADE PARKIN	131500.
LOW RISE OFF	70000.
NEIGHBORD CO	68000.

****

DEVEL HOLD WTTN.2 --- INCOME ANALYSIS ($ X 1000)

****

PREV.EQUITY ASSUMED: 0. COMPUTED EQUITY: 0.

TOTAL COST OF PROJ.: 8761. COMPUTED MOR-VAL RTO. 100.00

PERIOD	1	5	10	15	20	25
OPER INCOME	399.4	485.5	619.6	790.8	1009.3	1288.2
FIRST-AMORT	159.7	201.6	269.8	361.0	483.2	646.4
INTRST	525.7	483.8	415.6	324.3	202.2	38.8
DEPRECIATION	261.5	228.3	192.7	162.6	137.3	115.9
TAXABLE INC	-387.8	-226.5	11.4	303.9	669.8	1133.5
TAX BENEFIT	0.0	0.0	0.0	0.0	0.0	0.0
PRETAX C.F.	-285.9	-199.9	-65.7	105.5	324.0	602.8
C.F.AFT TAX	-285.9	-199.9	-65.7	105.5	324.0	602.8
ROR (CASH)	0.000	0.000	0.000	0.000	0.000	0.000
ROR(CASH) PARTNER= 1	0.0	0.0	0.0	0.0	0.0	0.0
INC.-F&C PARTNER= 1	399.4	485.5	619.6	790.8	1009.3	1288.2

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 4.690 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 7.260 %

```
*****************************************************************
CCMB. TOTAL CASH FLOW ($ X 1000)
*****************************************************************
```

PERIOD	1	5	10	15	20	25
DEVEL HOLD WTTN.	-285.9	-199.9	-65.7	105.5	324.0	602.8
ANNUAL CASH FLOW	-285.9	-199.9	-65.7	105.5	324.0	602.8
ACCUMULATED CASH	-285.9	-1219.7	-1829.7	-1661.4	-499.8	1929.4

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	1929.	-157.	-354.	-510.	-632.	-728.

CBD

The Louisville CBD stop illustrates the construction of a major transit terminal in a downtown area with close proximity to financial and public institutions and commercial centers. The stop is characterized as a major destination rather than origin, with major inter-modal and intra-modal interchange.

The specific site location is just east of the main CBD area on a block bordered by Liberty, Jefferson, Second and Third Streets. The site now houses a private commercial bus terminal, which is served by buses using city streets. In the proposed example, routes are at grade, both for long-haul buses and local minibus service. Only limited parking facilities are projected as park-and-ride or kiss-and-ride operations are not expected.

The area around the site includes largely low-grade commercial and transient residential uses. There is considerable open land, and land costs are generally low (under $5 per square foot). There is little land that has never been developed, so natural environmental considerations are almost non-existent. Lack of adequate water, sewer and utility systems, however, is detrimental to area growth.

LOUISVILLE CBD STOP CONTEXT Fig. 6/29

JEFFERSON STREET LOOKING WEST

Fig. 6/30

In terms of demographic data, the Louisville CBD is composed of four census tracts housing only 2,093 persons in 884 housing units. Family size is low, around 1.1 persons per unit, except in rooming houses or institutional housing serving large, non-family groups. The number of elderly residents is high and the number of children is low, except in institutional settings. There are almost no owned units, and many (19%) vacant units. Rents are low, and the population is somewhat more transient than the city average. There were no units under building permits from 1970-74. The percent Black residents varied but was not markedly different from the city average.

In terms of quality of the residential environment, the area is extremely poor. Unemployment is high, and education levels are low. The percent households in poverty is twice the city average (34%). Air pollution and noise pollution affect almost the entire area. Crime rates are as much as 16 times as high as the city average. Income is less than half the city average. The only major positive element of the area is low rates of overcrowding and relatively low rents as a percent of income. Residential properties seem to provide small, inexpensive units which are not available in other parts of the city.

A considerable portion of the community enhancement impact on the area must be considered in terms of employment, shopping and cultural aspects of the population which uses but does not live in the CBD. Some of the considerations are pointed up by contrast with suburban alternatives. By comparison, the CBD is more congested, further from much of the work population, provides older, less flexible and time-worn office and retail space, but does provide a greater concentration of office, retail and cultural outlets in one location than any outlying area. Noise and air pollution problems, of course, affect both resident and visitor populations.

In terms of economic characteristics, Louisville is a growing city with an in-migration of 7,000 people per year. Prognosis for the Center City area is potentially good, given the newly developing Riverfront project, goverment complex, and convention center; however, retail sales in the area are declining seriously and many merchants are moving to other more profitable locales in spite of the 4 block pedestrian shopping mall project recently opened on 4th Street. Inner city industry is currently leaving this area, and the out-migration is attributed to the national economy. Markets for office space must be evaluated on a case-by-case basis as there has been almost no change in demand for office space over the past decade. It is probable that tenants would be drawn from existing older office space in the CBD area, and the ability to rent-up new office space would be based on the comparative cost and quality of the new space.

At the local site level, the combination of the new convention center and Hyatt-Regency Hotel with transit ridership population can provide adequate market opportunities for

proposed local retail commercial facilities. The existing Galt House and proposed Hyatt Regency House provide significant quantities of new, high-quality hotel rooms. The development of the convention center and supporting facilities, however, may generate enough convention trade to support additional hotel development, beyond these current facilities.

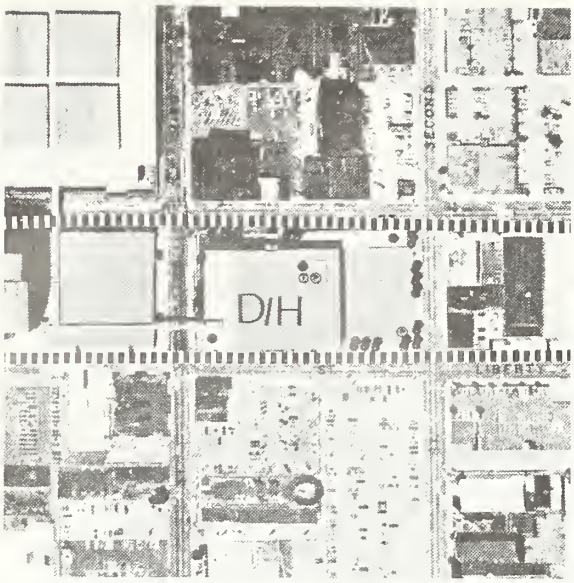
Increases in land values are not expected to be significant due to transit development, and the transit entity may in fact be capitalizing on value generated by convention center development.

VALUE CAPTURE ALTERNATIVE #1

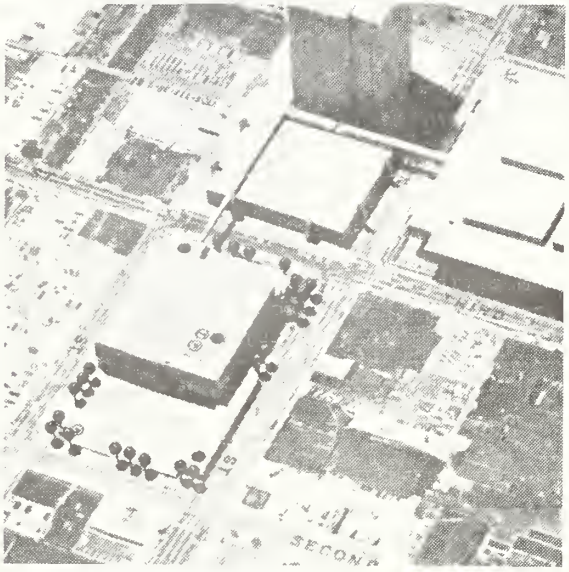
Value Capture strategies in the Louisville CBD are limited to a one block area bounded by Jefferson, Liberty, Second and Third Streets and comprising a land area of about 88,000 square feet. Fee simple title is acquired by direct purchase or condemnation for transit facilities and related parking. The major facility is a downtown bus terminal entered at grade from Jefferson and Liberty Streets, which serves line-haul exclusive busway lines, standard buses, and minibuses.

Alternative #1 develop revenues by the development and holding of the transit terminal, parking, small local commercial facilities related to transit users, and the convention center and hotel trade. Development is related to the public purpose of serving transit users and supporting transit ridership. Commercial facilities are not large enough to represent a major competitor to the private market or to outweigh in importance the transit facilities themselves.

The illustrative program is limited to the following facilities:



ALTERNATIVE #1 PLAN Fig. 6/31


ALTERNATIVE #1 AERIAL VIEW Fig. 6/32

	FACILITY			PARKING			TECHNIQUE
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
Ⓣ	Transit Terminal	8,750	1	115	Struct	40,250	Develop/Hold
				60	Grade	18,000	Develop/Hold
●	Local Commercial	31,250	2	100	Struct	35,000	Develop/Hold
				25	Grade	7,500	Develop/Hold

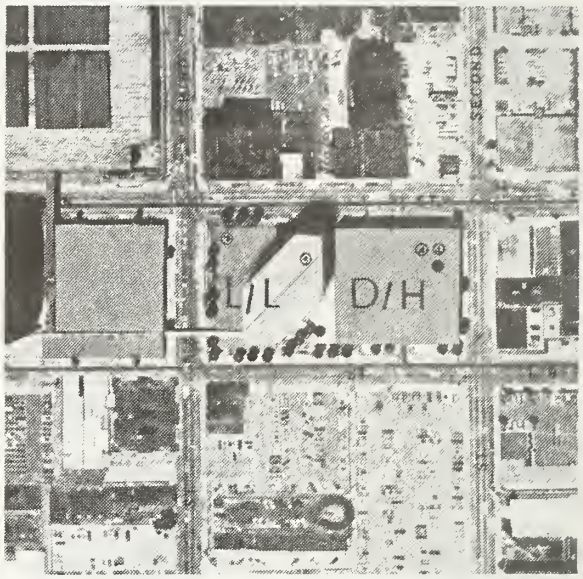
VALUE CAPTURE ALTERNATIVE #2

Alternative #2 is illustrated utilizing the same land area and method of acquisition as alternative #1. It is based, however, on a more optimistic consideration of the development potential of the site. Rather than expecting the transit entity to directly develop the more ambitious office and retail commercial facility, the alternative is presented as a develop/hold and land/lease strategy, with the transit terminal, parking and very limited commercial development by the transit entity, and lease of the western half of the site to a private developer under restrictions

supporting the public interest, for development of mid-rise office and additional retail commercial facilities. The illustrative program includes:

	FACILITY			PARKING			TECHNIQUE
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
Ⓣ	Transit Terminal	8,750	1	70	Struct	24,500	Develop/Hold
●	Neighborhood Commercial	17,500	1	70	Struct	24,500	Develop/Hold
●	Neighborhood Commercial	42,000	2	168	Struct	58,800	Land/Lease
⊙	Mid-Rise Office	160,000	8	640	Struct	224,000	Land/Lease

ALTERNATIVE #2 AERIAL VIEW Fig. 6/33



ALTERNATIVE #2 PLAN Fig. 6/34

VALUE CAPTURE ALTERNATIVE #3

Alternative #3 is based on exactly the same development program as alternative #2. However, instead of acquiring and leasing land, revenue is realized by taxation of independent private development on the site. Land acquired fee simple drops to only 44,000 square feet. Less control of development is obtained, but costs to the transit entity are minimized.

The illustrative program is identical to Alternative #2 with incremental tax financing substituted for land/lease as a recapture technique. The development district formed for taxation in this case will be limited to the one block site.

COMMUNITY IMPACT EVALUATION

Community impact evaluation in the Louisville CBD is extremely complex due to the wide range of interest groups involved, and the interrelated aspects of activities in the area. Many issues raised in the following discussion are open to question, and are subject to a wide range of external variables.

Social and economic impacts are of major importance. The most critical factor is the demolition of low-rent transient dwelling units and low-grade commercial facilities, and relocation of residents and/or businesses. Since the availability of substitute housing of low-quality and very low rent levels is always small, severe difficulties may be faced in relocating residents, and they may pay a high price in terms of increased costs or inability to find housing at all and becoming subject to the problems of those without homes. Similar problems are faced by low-grade commercial uses. At the same time, the elimination of these undesirable uses will probably be beneficial to shoppers, employees and visitors who will

be responsive to the upgrading of facility quality. Additionally, crimes and health problems related to the existing units may be reduced, again providing a net benefit to area users. Little data exists to even estimate the degree to which current residents or commercial units will just be relocated elsewhere, or disappear altogether.

Some new employment will be generated, primarily under alternatives #2 and #3, but it is unlikely to benefit any current area residents. Some improvement of quality indicators such as crime, education levels, and unemployment may occur due to removal of residents at the low end of the spectrum, but this reflects relocation of problems, not an improvement for the individuals concerned.

Environmental impacts are much simpler; and almost non-existent. Some additional sewer loads, and removal of blighted structures are the only measurable changes expected.

In terms of mobility and accessibility, the improvement of the quality of the transit terminal, the elimination of negative adjacent uses, the provision of related commercial facilities and the coordination of modal interchange are all expected to increase the desirability of transit ridership. By and large, these improvements are related to shoppers, employees and visitors to the CBD rather than area residents, and are expected to improve over time.

Redistribution/net gain and long range/short range issues have been considered in several of the previous paragraphs, but it should be noted that retail and office development is likely to mainly redistribute from other areas within the CBD, particularly in the short run. In the long run, the impact of the transit development is linked to the overall CBD growth, of which the transit development is a supportive, but not major, component. In both the short and long range the relocation of transient residents, the impacts on the individuals affected are expected to be highly negative, but may be redistributed to other suitable locations over time.

The net result of development in the CBD is a very strong negative impact on transient residents and low grade commercial businesses, and a net, across-the-board improvement for visitors, shoppers, employees, retailers, civic and business groups and the city. Whether these trade-offs and some possible compensations can be effectively made, is the key issue of the stop.

		AREA MEAN	CITY MEAN	CHANGE DUE TO VCP		
				ALT#1	ALT#2	ALT#3
PRIMARY INDICATORS	% Labor Force Unemployed	7.68	4.73	L/B	L/B	L/B
	% Population, 25 or over High School Graduates	35.2	42.5	H/B	H/B	H/B
	% Households in Poverty	34.4	16.7	L/B	L/B	L/B
	% of Tract with Air Pollution Problems	100.0	56.0	0	0	0
	Median Family Income	3019	7875	H/B	H/B	H/B
	Rent as % of Income: $5,000-$9,999 Income	15.6	17.7	HH/WW	HH/WW	HH/WW
	% of Units with 1.01 Persons per Room or More	4.65	8.7	0	0	0
SECONDARY INDICATORS	% of Tract with Water Pollution Problems	15.0	13.5	0	0	0
	% of Tract with Noise Pollution Problems	75.0	33.0	0	0	0
	% of Tract without Pollution	0.0	24.6	0	0	0
	% of Households with no Auto	86.8	23.87	L/B	L/B	L/B
	Median School Years Completed, 1970	8.9	10.8	H/B	H/B	H/B

NOTE: Numerical increase in some indicators denotes improvement, in other cases it indicates worsening of the current status. All indicators are referenced to the immediate stop context.

KEY:
HH - significantly higher indicator value
H - somewhat higher
O - no change
L - somewhat lower
LL - significantly lower
BB - significant improvement
B - some improvement
O - no change
W - somewhat worse
WW - significantly worse

COMMUNITY IMPACT INDICATORS

Fig. 6/35

FINANCIAL INVESTMENT ANALYSIS -
VALUE CAPTURE ALTERNATIVE #1

```
*********************
DEVEL HOLD    CBD1
DATA FOR THIS PART
*********************

DEVEL.USES          4
NO.OF YEARS        25
NO.OF PARTNR        1
YEAR OF SALE       30

% VACANCY         5.00
CAP. RATE        9.80
MORT:VAL.PTO   100.00
MTG.TERM        25.00
% L.T. INTRS     6.00
% RECAP@SALE   100.00
% COMMISSION      5.00
$EQUITY PAID     0.00
LANDCOS.$/SF     8.34
KSF PAR.SIZE    88.20
$ DEMOL.COST    85.00

FOR EACH PARTNER:

PARTNER NO.         1
% SHARE        100.00
% INCOME TAX      0.00
% CAP.GAINS       0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI    8750.
COMMUNITY CO   31250.
GRADE PARKIN   25500.
STRUCTURED P   75250.
```

```
*****************************************************************
DEVEL HOLD    CBD1    ---   INCOME ANALYSIS   ( $ X 1000 )
*****************************************************************

PREV.EQUITY ASSUMED:        0.   COMPUTED EQUITY:          0.
TOTAL COST OF PROJ.:     3475.   COMPUTED MOR-VAL PTO.   100.00

PERIOD                  1       5      10      15      20      25

OPER INCOME         211.3   256.8   327.8   418.4   533.9   681.5

FIRST-AMORT          63.3    80.0   107.0   143.2   191.7   256.4
      INTRST        208.5   191.9   164.8   128.6    80.2    15.4

DEPRECIATION         89.1    77.6    65.3    55.0    46.3    39.0
TAXABLE INC         -86.3   -12.6    97.7   234.7   407.4   627.1
TAX BENEFIT           0.0     0.0     0.0     0.0     0.0     0.0
PRETAX C.F.         -60.6   -15.0    55.9   146.5   262.1   409.6
C.F.AFT TAX         -60.6   -15.0    55.9   146.5   262.1   409.6

ROR (CASH)          0.000   0.000   0.000   0.000   0.000   0.000

ROR(CASH)
  PARTNER=     1      0.0     0.0     0.0     0.0     0.0     0.0

INC.-F&C
  PARTNER=     1    211.3   256.8   327.8   418.4   533.9   681.5

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10)   6.470 %
INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25)   9.390 %

*****************************************************************
COMB. TOTAL CASH FLOW ($ X 1000)
*****************************************************************

PERIOD                  1       5      10      15      20      25

DEVEL HOLD    CBD     -60.6   -15.0    55.9   146.5   262.1   409.6

ANNUAL CASH FLOW      -60.6   -15.0    55.9   146.5   262.1   409.6
ACCUMULATED CASH      -60.6  -191.7   -60.9   481.6  1549.6  3288.2

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %        0.00    5.00    6.00    7.00    8.00    9.00
PRESENT VALUE $        3288.   1259.   1042.    861.    711.    586.
```

FINANCIAL INVESTMENT ANALYSIS -
VALUE CAPTURE ALTERNATIVE #2

```
********************
DEVEL HOLD  CBD 2
DATA FOR THIS PART
********************

DEVEL.USES          3
NO.OF YEARS        25
NO.OF PARTNR        1
YEAR OF SALE       30

% VACANCY         5.00
CAP. RATE        9.80
MORT:VAL.RTO   100.00
MTG.TERM        25.00
% L.T. INTRS     6.00
% RECAP@SALE   100.00
% COMMISSION     5.00
$EQUITY PAID     0.00
LANDCOS.$/SF     8.34
KSF PAR.SIZE    44.00
$ DEMOL.COST    85.00

FOR EACH PARTNER:

PARTNER NO.         1
% SHARE       100.00
% INCOME TAX     0.00
% CAP.GAINS      0.00

DEVELOPMENT PROGRAM:

PUBLIC INST1    8750.
STRUCTURED P   49000.
COMMUNITY CO   17500.
```

```
*****************************************************************
DEVEL HOLD  CBD 2    ---  INCOME ANALYSIS   ( $ X 1000 )
*****************************************************************

PREV.EQUITY ASSUMED:        0.  COMPUTED EQUITY:            0.
TOTAL COST OF PROJ.:     2147.  COMPUTED MOR-VAL RTO.    100.00

PERIOD                   1       5      10      15      20      25

OPER INCOME          126.0   153.1   195.5   249.5   318.4   406.3

FIRST-AMORT           39.1    49.4    66.1    88.5   118.4   158.4
      INTRST         128.8   118.5   101.8    79.5    49.5     9.5

DEPRECIATION          56.7    49.4    41.6    35.0    29.5    24.9
TAXABLE INC          -59.5   -14.8    52.0   135.0   239.3   371.9
TAX BENEFIT            0.0     0.0     0.0     0.0     0.0     0.0
PRETAX C.F.          -41.9   -14.8    27.5    81.5   150.4   238.4
C.F.AFT TAX          -41.9   -14.8    27.5    81.5   150.4   238.4

RCR (CASH)           0.000   0.000   0.000   0.000   0.000   0.000

RCR(CASH)
  PARTNER-     1      0.0     0.0     0.0     0.0     0.0     0.0

INC.-F&C
  PARTNER-     1    126.0   153.1   195.5   249.5   318.4   406.3

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10)   6.220 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25)   9.100 %
```

```
**********************
LAND LEASE  CBD 2
DATA FOR THIS PART
**********************

DEVEL.USES          3
NO.OF YEARS        25
YEAR OF SALE       30

% VACANCY         5.00
CAP. RATE        9.80
% RECAP@SALE     2.00
% COMMISSION     5.00
% L.T. INTRS     9.00

LANDCOS.$/SF     8.34
KSF PAR.SIZE    44.20
$ DEMOL.COST     0.00

DEVELOPMENT PROGRAM:

COMMUNITY CO   42000.
MID RISE OFF 160000.
STRUCTURED P 282800.
```

```
*****************************************************************
LAND LEASE  CBD 2    --- LAND LEASE/SALE ANAL.($ X 1000)
*****************************************************************

TOTAL COST OF PROJ.:      369.  (INCL. ACQ.+ CLEAR. ONLY)

PERIOD                   1       5      10      15      20      25

LEASE INCOME          90.0    90.0   122.9   164.8   218.3   286.6

REV AT SALE         1213.1  1213.1  1548.2  1975.9  2521.8  3218.6
TOT TAXES              0.0     0.0     0.0     0.0     0.0     0.0
EXPN OF SALE          60.7    60.7    77.4    98.8   126.1   160.9
PROC AFT TAX        1152.0  1152.4  1470.8  1877.1  2395.7  3057.6

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10)  39.590 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25)  35.940 %
```

****

CCMB. TOTAL CASH FLCW ($ X 1000)

****

PERIOD	1	5	10	15	20	25
DEVEL HOLD CBD	-41.9	-14.8	27.5	81.5	150.4	238.4
LAND LEASE CBD	90.0	90.0	122.9	164.8	218.3	286.6
ANNUAL CASH FLCW	48.1	75.3	150.4	246.3	368.7	525.0
ACCUMULATED CASH	48.1	306.7	970.0	2088.4	3787.6	6228.0

$NET PRESENT VALUE OF DEVELOPMENT PRCJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	6228.	2940.	2571.	2260.	1997.	1773.

FINANCIAL INVESTMENT ANALYSIS -
VALUE CAPTURE ALTERNATIVE #3

****

DEVEL HOLD CBD 3
DATA FOR THIS PART

****

DEVEL.USES	3
NC.OF YEARS	25
NC.OF PARTNR	1
YEAR OF SALE	30
% VACANCY	5.00
CAP. RATE	9.80
MCRT:VAL.RTO	100.00
MTG.TERM	25.00
% L.T. INTRS	6.00
% RECAP@SALE	100.00
% COMMISSION	5.00
$EQUITY PAID	0.00
LANDCCS.$/SF	8.34
KSF PAR.SIZE	44.00
$ DEMCL.COST	85.00

FCR EACH PARTNER:

PARTNER NO.	1
% SHARE	100.00
% INCCME TAX	0.00
% CAP.GAINS	0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI	8750.
STRUCTURED P	49000.
CCMMUNITY CO	17500.

****

DEVEL HOLD CBD 3 --- INCCME ANALYSIS ($ X 1000)

****

PREV.EQUITY ASSUMED: 0. CCMPUTED EQUITY: 0.

TCTAL COST OF PRCJ.: 2147. CCMPUTED MCP-VAL RTO. 100.00

PERICD	1	5	10	15	20	25
OPER INCCME	126.0	153.1	195.5	249.5	318.4	406.3
FIRST-AMCRT	39.1	49.4	66.1	88.5	118.4	158.4
INTRST	128.8	118.5	101.8	79.5	49.5	9.5
DEPRECIATICN	56.7	49.4	41.6	35.0	29.5	24.9
TAXABLE INC	-59.5	-14.8	52.0	135.0	239.3	371.9
TAX BENEFIT	0.0	0.0	0.0	0.0	0.0	0.0
PRETAX C.F.	-41.9	-14.8	27.5	81.5	150.4	238.4
C.F.AFT TAX	-41.9	-14.8	27.5	81.5	150.4	238.4
RCR (CASH)	0.000	0.000	0.000	0.000	0.000	0.000
RCR(CASH) PARTNER- 1	0.0	0.0	0.0	0.0	0.0	0.0
INC.-F&C PARTNER- 1	126.0	153.1	195.5	249.5	318.4	406.3

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 6.220 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 9.100 %

```
********************** ***********************************************************
INC.TAX FINANC  CBD3    INC.TAX FINANC  CBD3 --- TAXATION ANALYSIS  ( $ X 1000 )
DATA FOR THIS PART
********************** ***********************************************************


DEVEL.USES          3
NO.OF YEARS        25

% VACANCY         5.00
CAP. RATE        9.00
LANDCOS.$/SF     8.34
KSF PAR.SIZE    44.20

% ASSES.RTO.     89.00
ADVAL.TAX RT     0.00
INC.TAX RATE     1.64
IMPR.VALUE $   150.00


DEVELOPMENT PROGRAM:
COMMUNITY CO  42000.
MID RISE OFF 160000.
STRUCTURED P 282800.
```

PERIOD	1	5	10	15	20	25
TAX BASE TOT	7661.9	9313.0	11886.0	15169.9	19361.0	24709.9
AD VAL TAXES	0.0	0.0	0.0	0.0	0.0	0.0
INC TAX BASE	7200.3	8851.4	11424.4	14708.3	18899.4	24248.4
INCR TAXES	118.1	145.2	187.4	241.2	309.9	397.7

```
*****************************************************************
COMB. TOTAL CASH FLOW ($ X 1000)
*****************************************************************
```

PERIOD	1	5	10	15	20	25
DEVEL HOLD CBD	-41.9	-14.8	27.5	81.5	150.4	238.4
INC.TAX FINANC	118.1	145.2	187.4	241.2	309.9	397.7
ANNUAL CASH FLOW	76.1	130.4	214.9	322.7	460.4	636.1
ACCUMULATED CASH	76.1	513.0	1410.2	2797.6	4810.9	7622.7

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	7623.	3694.	3250.	2875.	2556.	2285.

Notes

1. City population is 347,300; SMSA: 899,600; Source: Louisville Chamber of Commerce estimates, April 1, 1973.

2. ATE Management and Service Company, Technical Back Up - TARC Final Report.

3. Vogt-Ivers and Assoc., Transportation Report, Louisville Metropolitan Comprehensive Transportational Development Program, January, 1969, recommended radial highway development both in the southwest and southeastern portions of Louisville and Jefferson County.

4. DeLeuw, Cather and Co., Rapid Mass Transit Study, Louisville Metropolitan Area, Chicago, 1969.

5. Vogt-Ivers, op cit.

6. This should be considered with evidence provided by Heidi R. Fulkerson, The Application of Louisville Area Travel Elasticities to the Projecter of Travel Volumes for Three Bus-Only Lanes. Prepared by the Kentucky and Indiana Regional Planning Agency (KIPDA), August, 1975 which shows modest system ridership when considered with present vehicular access.

7. The Louisville Times, "Bus Ridership Jumps During First Year of TARC Operation", September 23, 1975.

8. The Louisville Times, "Off on a LARC" ..., November 17, 1975, Page B1.

9. KRS 83.410, 83.420 and 83.520.

10. Spahn v. Stewart, 103 S.W. 2d 651 (1937); Milhar v. City of Louisville, 321 S.W. 2d 237 (1959).

11. KRS 58.010.

12. Rice Center for Community Design + Research, A Value Capture Policy, Legal Volume, November 1974.

13. Courtesy Sandwich Shop, Inc. v. Port of New York Authority, 12 N.Y. 2d 379, 190N.E. 2d 402 (1963). App dismissed 375 U.S. 78 and Atwood v. Willacy Navigation District, 271 S.W. 2d 137.

14. 33 F.2d 242 (6th Circuit, 1929) affirmed on other grounds 281 U.S. 439 (1930).

15. See KRS 58.010-58.140.

16. KRS 65.520, 66.517 and 99.650(k).

17. KRS 58.010 and 58.140.

18. KRS 58.010(1), 58.140.

19. KRS Ch. 58, §§67A.010-67A.040 and §§273.161-273.400.

20. Preliminary Official Statement (March 22, 1974) at pp. 2 and 9; Mortgage Deed of Trust by and between Lexington Center Corporation, Trustor, and the Louisville Trust Company, Trustee, dated April 1, 1974.

21. City of Corbin v. Johnson, 316 S.W. 2d 551.

22. Atwood v. Willacy Navigation District, op cit.

23. KRS 65.530(1).

24. KRS 65.530(4).

25. Memorandum dated July 21, 1975 from Fred Davis to Larry Zielke, attorney for the County Judge's Office.

26. Annual Report of the Louisville and Jefferson County Riverport Authority, December 31, 1974. Environmental Assessment of the Riverport Industrial Development Proposal by the Riverport Authority, prepared by the Swindell-Dressler Company, August, 1975; George H. Yater, "Riverport: New Kingdom for the Southwest", Louisville (magazine) July, 1974, pp. 39 et seq.

27. KRS 103.245.

28. KRS 96A.020 and 271A.020.

29. Urban Land Institute Project Ref. File #20, Vol. 3, "Riverfront Plaza".

30. Eminent Domain in Kentucky, op cit.

31. KRS 65.530(4).

32. According to Kennedy Helm, counsel to the Air Board, as reported in memo of Fred Davis to Larry Zielke, after Davis talked with Helm (July 21, 1975).

33. KRS 183.133(4).

34. Davis Memorandum, op cit.

35. KRS 93A.010(12), and 93A.030.

36. KRS 93A.020.

37. KRS 99.755-99.760.

38. Ester Miller v. Covington Development Authority (Kenton Circuit Court) No. 28779, (July, 1975).

39. Complaint filed in Ester Miller v. Covington Development Authority, op cit., p.5.

40. KRS 65.210-65.300.

41. KRS 96A.370.

42. Schimpeler-Corradino Associates, Metropolitan Transit Improvement Program for Louisville, Kentucky, Summary Report, November 1973, pp.1-2.

43. Dun and Bradstreet.

44. Summary of Recommended Amendments and Substitutions to the Executive Budget 1975-1976, City of Louisville, Part 4.

45. ATE Management and Service Co., Inc. TARC, final report, Section V-4.

46. Louisville Area Chamber of Commerce, Louisville FACTFILE, TAXES, p.c.

47. KRS 93A.010(12), and 93A.030.

48. Center City Commission, p. 87.

49. Center City Commission, op cit.

50. Ibid.

51. KRS, Ch. 131, 99.610-99.680, and KRS Ch. 132, 99.150-99.770.

52. KRS 99.750.

53. KRS 99.760.

54. KRS 99.670, Bond Issue, Agency Powers.

55. Center City Commission, pp. 82-83.

56. Moody's Municipal & Government Manual, p. 1372.

57. City of Louisville, Executive Budget, 1974-1975.

58. Ibid.

59. Moody's Investor Service, op cit., p. 1372.

60. Ibid.

61. Ibid.

62. Ibid.

63. ATME, op cit.

64. Ibid.

65. Major sources included F.W. Dodge Corporation; Urban Land Institute; Building Owners and Managers Association International; Harris, Kerr, Forster and Company; Laventhol, Krekstein, Horvathand Horivath; and Institute of Real Estate Management of the National Association of Realtors.

66. Fulkerson, op cit.

67. Note that revenues of $.75 per car per day was assumed for park-and-ride services. Current park-and-ride plans in Louisville assume no changes will be made to users.

Part 7 Chicago Case Study

7a Introduction

This Chicago study provides a dramatic contrast with Louisville and Los Angeles in the Value Capture Policy Research. It has provided an opportunity to examine potentials for application (as well as the opportunity to study some existing applications) in a very large, highly developed urban setting replete with an extensive rapid transit system.

Focal issues to the investigations in Chicago are: 1) the city has enjoyed some form of rapid transit system since the 1880's - transit and high levels of accessibility are not at all a new idea to most Chicagoans; 2) development has resulted in significant densities in the urban core with most land ranging in price between $200 and $300 per foot[1]; 3) transit operations are complex with no less than six commercial commuter railroads and the nation's second largest public mass transit system besides numerous other participants from a developmental or regulatory standpoint.

Recent years have seen the aging Elevated System of the Chicago Transit Authority (CTA) in the Loop area face replacement. In 1968 the City of Chicago carried out the Central Area Transit Planning Study to ascertain the feasibility of replacement of the elevated structure in the process of improving the overall distribution of commuter passengers in the central area.

In 1971 further studies corroborated the earlier work leading toward the development of a distributor subway in the Loop area. By Illinois statute in 1970, the Chicago Urban Transportation District (CUTD) was formed with the objective of improving transportation within the Central Area. Resident voters approved the District later that year, and more recent years have seen the completion of numerous studies related to the development of the Monroe Street distributor subway and other improvements.

Phase I of the Chicago Central Area Transit Project (CCATP) was completed in late 1974. This included general plans, design criteria, and specifications for the core transit improvements in the District. Phase II, which is to include the design and construction of these improvements, is currently awaiting UMTA funding, which will trigger other local sources as well.[2]

ASSUMPTIONS

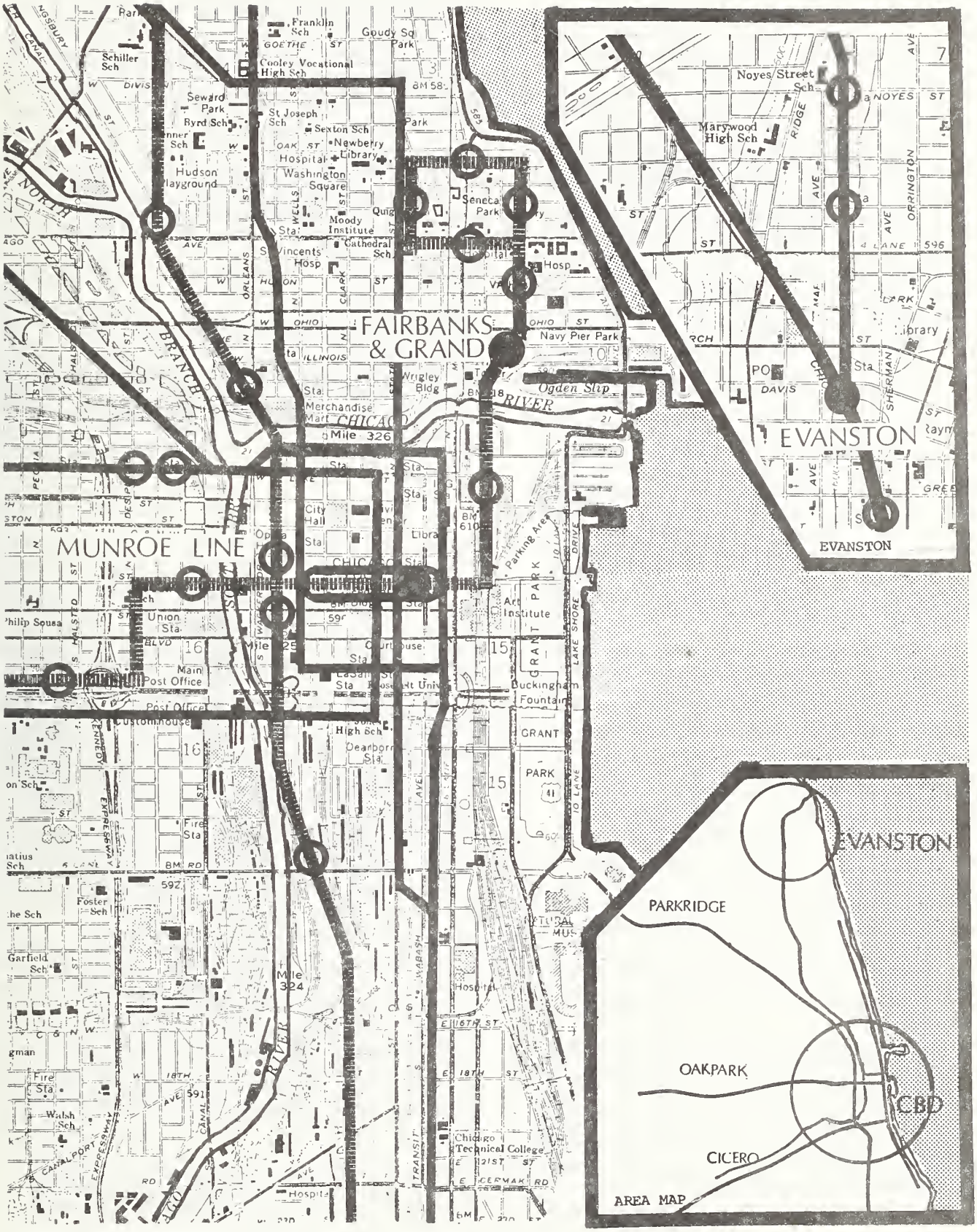
Adoption of a transit system for use in alternative stop application investigation was based on proposed improvements in the CCATP. Two primary elements of interest include a new subway line via Monroe Street from the University of Illinois Circle Campus to Stetson Station north of Randolph Street and alternative system alignments for an extension of this line northward from the Stetson Street Station, east of Michigan Avenue to the vicinity of the John Hancock Center. An alignment of this north-south line along Fairbanks Court was assumed for stop investigations in the Fairbanks and Grand Alternatives.

As investigations in Chicago were proceeding, officials pointed out development activity on the part of CTA, the City of Evanston, and private developers on two projects at or near CTA's Davis Street Station in downtown Evanston to the north. Because of the current activity and the uniqueness of the site, Evanston became a third example stop location for Chicago. See insert: Fig. 7/1.

Thus, for the purposes of example stop application, three urban settings were selected. These included Evanston, where a prime objective was urban redevelopments, and Monroe and Wells within the Loop, with the opportunity to look at a very high density office and commercial environment where transit access in anyone's books is already good. Finally, Fairbanks and Grand Avenue was considered because of relatively low densities of land use and significant increase of immediate site accessibility to the area north of the Loop due to the introduction of transit.

OVERVIEW OF AGENCIES

The situation is complex, because of the three public entities involved. First, Chicago Transit Authority (CTA) created by an act of the General Assembly of Illinois on April 12, 1945, under the Metropolitan Transit Authority Act (Illinois Rev. Stat. 45), provides elevated, subway, and bus transportation in the Chicago area. The territory serviced embraces 85 municipalities. Sec-



CHICAGO TRANSIT SEGMENTS ASSUMED

Fig. 7/1

ond, the Chicago Urban Transit District (CUTD), created by a resolution of the Chicago City Council in April 1970, is a separate municipal corporation with tax levying powers encompassing the Central Business District of Chicago. Established under Illinois statute for the purpose of carrying out the Chicago Central Area Transit Project (CCATP), its prime objective is to undertake construction of capital improvements. Upon completion, it is contemplated that the constructed facilities will be operated by the CTA.[3] Third, the Regional Transit Authority (RTA) is a six county jurisdiction empowered to oversee all public and private modes of transportation, including funding. It will eventually oversee and be the recipient agency for all Federal capital grant programs, with subsequent disbursal to the CTA and the CUTD. It will place restrictions on and review all purchase and service contracts for public transit entities within its jurisdiction.

Within the discussion following, it should be kept in mind that this investigation does not in any way imply that the CTA, CUTD, or RTA should apply Value Capture. These agencies and their past histories lend evidence which supports conclusion about problems as well as opportunities for Value Capture application which may face <u>any</u> transit development entity in the region.

Legal, Financial, and Community Design Findings have been based in part on discussions with the following resources:

<u>Regional Transit Authority (RTA)</u>
Mr. Milton Pikarsky, Chairman

<u>Chicago Transit Authority (CTA)</u>
Mr. Tyrill Hill, Director of Development
Mr. Judd Laurie, Director of Research
Mr. Nadeem Tahir, CCATP Coordinator
Mr. Lewis Jenkins, Evanston Program Coordinator
Mr. Ron Bartkowicz, Legal Department
Ms. Beats Welsh, Capital Development Department
Mr. Gerry Hall, Capital Development Department
Mr. Thomas Kennedy, Supervisor, Real Estate Department
Ms. Joann Vlecides, Manager, Development and Planning Department
Mr. Sal M. Bianchi, General Counsel, Grants, Law and Real Estate

<u>Chicago Urban Transportation District (CUTD)</u>
Mr. Harold Nelson, General Manager
Mr. William Kwan, Project Planner
Mr. George Hayes, Project Manager, Supervising Consulting Architect
Mr. Doug Tweedie, Architect

<u>City of Chicago, Department of Public Works</u>
Mr. Cemal Egeman, Research Director
Mr. Steven Eimer, Research and Development Division

<u>City of Evanston</u>
Mr. Edgor Vanneman, Mayor
Mr. Dennis Dawson, Deputy Village Manager
Mr. Richard E. Carter, Planning Director
Mr. Edward J. Drost, Community Development Group Manager
Mr. Jack Siegal, City Attorney

<u>Other Contacts</u>
Mr. R. Marlin Smith, Special Counsel, City of Urbana
Mr. Verjak, Legal Department, Illinois Tollway Commission
Mr. Robert V. Sharp, Partner, Chapman and Cutler, Attorneys
Mr. Rodney Engelen, Vice President, Barton-Aschman Associates

7b Legal Findings

The situation in Chicago is complex, largely because the current rapid transit operating agency, the CTA or Chicago Transit Authority, was created in part from existing <u>private</u> rail systems, a number of private uses on formerly private property became private uses on <u>public</u> property as the CTA took over leaseholds of the private systems they absorbed. Most of those uses that have had any economic viability have <u>remained</u> on CTA property, apparently without complaint, their rents in sometimes key locations adding to the revenues of the system. The use of public property--especially transit system property--by private concerns is thus an established fact in Chicago, whether or not it would have been legally permissible <u>ab initio</u>.

It is worth noting at the outset that Illinois municipalities are specifically authorized to undertake certain mass transit projects and to generally acquire real estate for the transportation of persons and property. Chicago is a home rule municipality under the 1970 constitution for the State of Illinois, and would presumably have such powers in any event.

Finally, concern has been expressed by local sources that while value recapture could conceivably (and in some instances, does)

work in some fashion in Chicago, many techniques addressed in this investigation would involve public competition with elements of the private sector in such a fashion as to make such techniques pragmatically--and politically--unfeasible. In particular the real estate and development community, followed by financial institutions, were singled out. Concern was also voiced about the possibility that the public sector would not be able to move as quickly and expeditiously as the private sector in undertaking some of the development likely with Value Capture.

SUPPLEMENTAL CONDEMNATION

It would appear that supplemental condemnation for all but the economic success of the venture, would run into no legal obstacles in Chicago. It is also arguable that using public lands, once validly acquired for another public purpose, for private purposes, or disposing of such lands, will create no insuperable difficulties.

PUBLIC PURPOSE

While there is nothing in the cases and statutes in Illinois which would expressly declare supplemental condemnation to be for a public purpose in Illinois, a survey of the case law, especially as it relates to a number of statutes clearly injecting local government into heretofore private enterprise, certainly gives reason for optimism, Illinois courts have upheld statutes authorizing the acquisition of property for industrial parks, rail terminals, parking lots, and downtown development in both blighted and unblighted areas, in many instances empowering local authorities to participate in what would otherwise be considered private ventures. In nearly every case, such activity has been sustained by the courts in this state, which appear to have adopted a liberal definition of public purpose, at least in connection with such activities.

The courts have recently considered the question of public use in a number of situations. In a case[5] from the 1950's upholding the authority of any Illinois city to condemn land for a parking facility and lease the same to a private party for operation, the court considered whether the fact that a private party would benefit from the statutorily declared public purpose rendered the project invalid:[6]

> *As we view it, there is involved the safety and well-being of all the residents of a community so affected. To provide for off-street parking facilities is certainly a step to meet the public need. We are of the opinion that the Parking Act embraces the taking of land for a public use.*
>
> *Appellees' objections which go to the operation of the act do little to alter that conclusion. The argument that the use is private because it enables a municipal corporation to enter into business in direct competition with individuals who are now operating parking lots cannot be sustained.*

The court also set out a series of tests for the taking of land for a public purpose:[7]

> *(1) that it affect a community as distinguished from an individual; (2) that the law control the use to be made of the property; (3) that the title so taken be not invested in a person or corporation as a private property to be used and controlled as private property; and (4) that the public reap the benefit of public possession and use, and that no one exercise control except the municipality. Almost to the same effect is the definition found in Cleveland, Cincinnati, Chicago and St. Louis Railway Co. v. Polcat Drainage Dist., 213 Ill. 83: "A Public use means public usefulness, utility, advantage or benefit. It is not essential that the entire community or people of the State, or any political subdivision thereof, should be benefited or share in the use or enjoyment thereof. The use may be local or limited. It may be confined to a particular district and still be public. [Citation] If local or limited, the use must be directly beneficial to a considerable number of the inhabitants of a section of the State, and the property to be taken must be controlled by law, for the advantage of that particular portion of the community to be benefited." Measured by the above decisions, it is difficult to see that the Parking Act manifestly authorizes the taking of land for a private purpose.*

In some respects building upon this test, the Illinois Supreme Court upheld a statute[8] 8 years later which authorized the creation of rail terminal authorities and granted them broad powers to condemn and redevelop land in former railway terminal areas. In the process the court stated the public purposes to be accomplished, and the means by which this could be accomplished, very broadly indeed:[9]

The Authority is authorized to acquire by gift, purchase or eminent domain the property located within the boundaries of such area. Upon acquisition the Authority is authorized to remove the existing terminals, terminal facilities, freight facilities and other buildings and structures located within the area and install and construct streets, utilities and site improvements; construct and operate a new consolidated railroad terminal, terminal facilities and approaches thereto; enter into leases and contracts with railroad companies for use by said railroad companies of such terminal and terminal facilities; enter into contracts and leases for the operation of restaurants, stores or other enterprises commonly found in a terminal station; make provision for off-street parking; convey real property in the area not required for the construction and operation of the new terminal approaches thereto to public bodies for streets, alleys, schools, parks and playgrounds and for other public purposes and to convey any land not needed for the foregoing purposes to private individuals and corporations for redevelopment by private enterprise in accordance with a redevelopment plan to be approved by the Authority and the city council of the city.

* * * *

"Public purpose" is not a static concept. It is flexible, and is capable of expansion to meet conditions of a complex society that were not within the contemplation of the framers of our constitution. [Citing cases]

The primary objects of the statute are the removal of the blighted conditions caused by antiquated terminal areas, the promotion of the growth and development of the city, and the relief of traffic congestion by extending streets through the areas and by furnishing off-street parking. Contentions that similar statutes did not serve a public use and a public purpose have been rejected. [Citing cases] It may be that private railroad corporations will derive some benefit under the act. Those benefits, however, will be incidental to the principal purpose of the statute, as were the collateral benefits in the cited cases. The only portion of the area in which the railroad companies will have any direct interest will be the portion occupied by the new consolidated station and its approaches. The Authority will own and operate the facilities; the railroad companies will be its lessees. These circumstances neither neutralize nor destroy the public purpose and public use that the General Assembly has found to exist. (Emphasis added.)

Recently the courts also upheld an Illinois statute which permits municipal corporations to acquire and construct industrial facilities and to lease the same to private parties.[10] Once again, the court set out in some detail a broad and liberal definition of public purpose:[11]

It is urged that the Act, in establishing a scheme for leasing and ultimately conveying the property to a private tenant, is not an enactment for public purposes and thus contravenes section 1 (a) of article VIII of the 1970 constitution, which provides: "Public funds, property or credit shall be used only for public purposes." We assume, without deciding, that public funds or property in some manner may be involved, and that the "public purpose" test must be met.

* * * *

We have held on a number of occasions that if the principal purpose and objective in a given enactment is public in nature, it does not matter that there will be an incidental benefit to private interest. [Citing cases] While we acknowledge that there is a benefit to private interests in the financing of industrial projects under the Act, we hold that the principal purpose and objective of the Act is public in nature. Therefore, it does not matter that there will be an incidental benefit to private interests.

In Cremer v. Peoria Housing Authority (1948), 399 Ill. 579, at 588, we recognized that what is for the public good and what are public purposes are, in the first instance, questions for the General Assembly to determine; that the legislature is vested with a large discretion; that its determinations are entitled to full consideration; and that courts are not warranted in setting aside such an enactment unless it is clearly evasive of or contrary to constitutional prohibitions. We find no clear evasion of a constitutional prohibition relative to the Act meeting the public purposes standard. (Emphasis added.)

Finally, the legislature has recently granted authority to municipal corporations redeveloping commercially blighted areas by acquiring land in such areas (including by eminent domain) and the constructing and then renting, leasing, or selling commercial structures therein to private parties.[12] Such redevelopment must be in accordance with a plan. A case has recently been brought to test the legality of the procedures,[13] and at least one major municipal corporation is ready to proceed with such a downtown redevelopment under the Act as soon as the courts have done with it.

SUPPLEMENTAL CONDEMNATION FOR ECONOMIC BENEFIT

It is unlikely that supplemental condemnation solely to protect or insure the economic viability of a transit system would be an acceptable option in Chicago. It would appear the best method of constructing commercial facilities in aid of the system would be to lease (or sell) land already owned and acquired for a clean public purpose. Experts in Chicago stressed the importance of the commercial facilities being related in some fashion to the convenience and necessity of the transit district for transit purposes and for the patrons thereof.

On the other hand, there appeared to be some willingness on the part of CTA authorities to try some limited supplemental condemnation strictly to benefit the CTA economically. Another expert suggested that if the financial viability of the district would not serve to justify the acquisition of property for commercial developments, the safety of the CTA and its patrons might. Harkening back to the "protective" theory, it was suggested that the guarantee of a minimum level of activity around a transit stop would considerably reduce the incidence of street crime, and so could be justified on a health and safety basis.

SUPPLEMENTAL CONDEMNATION FOR THE FUTURE

Most of the experts interviewed agreed it was likely that supplemental condemnation for future use was a valid exercise of the power of eminent domain, despite what is generally regarded to be a fairly narrow, though increasingly flexible, concept of public purpose in Illinois in this area. One expert indicated that a plan of sorts with condemnations not taking place much further than an estimated 10 years in advance of use (better yet if it were only 5 years) would be, if not necessary, helpful in justifying such condemnation. This kind of "future" condemnation is most commonly found with respect to land needs for educational institutions. A reasonable amount of land may usually be so taken for anticipated future requirements.[14]

Once property has been acquired, there appears to be little difficulty in disposing of it by sale, even at a profit. There is also considerable agreement that such property could be leased to private parties for development, the rents going to a governmental entity for purposes of defraying costs.

In fact, the enabling legislation for the CTA expressly contemplates such disposition of "excess" property by either sale or lease:[15]

> *Section 11. Lease, Sale or Other Disposition of Property.*
>
> *The Grantee may lease, sell or otherwise dispose of any property in its property accounts which is no longer necessary, appropriate, or adapted to the proper operation and maintenance of the Transit System.*
>
> *Any property so sold or disposed of shall be removed from the property accounts of the Grantee.*
>
> *The net rental or net income arising from the leasing of any property in the property accounts of the Grantee shall constitute and be part of the gross revenues of the Grantee but only so long as such property is used or useful as operating transportation property.*

According to a recently-published CTA manual on real estate practices and procedures,[16] disposition of "surplus" property is handled by the Real Estate Department. That Department analyzes the CTA's holdings from time to time to determine where real property rights are not necessary for CTA's present or future needs. The manual lists several examples:[17]

1. Air spaces over transit lines and station facilities, including station parking lots.

2. Surface spaces over and alongside subsurface transit facilities.

3. Surface spaces beneath transit facilities such as aerial structures.

4. Excess land lying outside of CTA right-of-way; and

5. Surface space required for future transit development such as the expansion of parking facilities at station areas.

When it is decided to sell property rights (as opposed to lease, CTA engages in limited Value Capture:[18]

a. *Sale or long-term grants of excess property rights within developing economic zones shall be deferred until substantial value appreciation has accrued as a result of this development.*

* * *

b. *Generally, CTA participation will be through its land ownership, with the aim of achieving optimum return, while retaining maximum control.*

Indeed, there is considerable evidence of such private uses on transit district property in Chicago. Having acquired much of the system from a multitude of private rail companies in the 1940's, the CTA also acquired a number of leaseholds for such as newspaper and food vending. Although many of those tenancies were year-to-year in nature, many have been continued, generally in the area of a transit stop. Most of the news and food vendors, clearly serve the convenience of the transit system's patrons as well as provide additional revenue for the system.

An apparently fruitful source of "extra" land is the property condemned by the CTA for use as turning circles for buses at various points on the CTA's bus routes. Such areas are considerable in size and are available for other uses should bus routes be discontinued.

One municipal attorney indicated that under the Illinois Constitution's home rule provisions, he would have no hesitation in arguing that a municipality could acquire and lease or sell property for the purpose of adding to its tax base, an argument convertible to "economic benefit" with respect to transit stops. He bases this argument on the old "redevelopment" cases in Illinois which formerly required a showing of blight or slum conditions. In any event, it appears a plan and declaration of purpose would still be needed.

SUPPLEMENTAL CONDEMNATION FOR ACQUISITION OF REMNANTS

As noted above, the CTA regularly acquires by fee sizeable lots for the purposes of bus turn-arounds. Attorneys for the CTA indicate they regularly acquire larger areas than are strictly necessary in order to "square off" parcels.

The State Highway Department is also authorized by statute to acquire a limited amount of remnant property, but may only sell and exchange --not develop--it.[19]

AIR, SURFACE AND SUBSURFACE RIGHTS

There appears to be general agreement that, as with surplus surface property, dealing with air rights over public land in such a fashion as to permit commercial development thereon would raise few ultimate legal problems in Chicago. Such air rights are regularly leased or sold by the CTA, often at a sizeable profit.[20] Moreover, considerable use of air rights is likely with respect to current joint developments involving CTA and nearby communities, about which more, later.[21]

Experts indicated that such uses ought to be, once again, in some fashion related to transit, for the convenience of the system's patrons. It would be easier to justify a hotel atop a transit stop if, for example, the transit line extended out to an airport... It is also fairly clear that other agencies, especially general purpose municipal corporations like the City of Chicago, have dealt in or encouraged air rights development. The Illinois Central air rights development near the lakefront which involved vacating of City rights-of-way was particularly cited. We were referred to those statutes in Illinois pertaining to Industrial Development Districts (expenditure of public funds for land leased to private industry, for the purpose of increasing tax revenue) and downtown development districts--like Urbana, Illinois.

In some instances, dealing in validly-acquired surface rights may be sufficient. One of the agencies with broad power to acquire land by eminent domain for a host of purposes in Chicago is the Chicago Park District. Its potential for cooperation with other entities as a result of what it is statutorily authorized to do is considerable, and demonstrates the kind of breadth which could be helpful with respect to transit authorities:[22]

The Chicago Park District shall have the power to acquire by gift, grant, or purchase, or by condemnation and to incur indebtedness for the purchase of any and all real estate lands, riparian estates or rights, and all other property required or needed for any such park or for parkways, driveways, or boulevards, or for extending, adorning, or maintaining the same for the purpose of establishing, acquiring, completing, enlarging, ornamenting, building, rebuilding and improving public parks, boulevards, bridges, subways, viaducts and approaches thereto, wharfs, piers, jetties, air landing fields and basins, shore protection works, pleasure grounds and ways, walks, pathways, driveways, roadways, highways and all public works, grounds or improvements under the control of and within the jurisdiction of such park commissioners and including the filling in of submerged land for park purposes and constructing all buildings, field houses, stadiums, shelters, conservatories, museums, service shops, power plants, structures, playground devices, boulevard and building lighting systems and building all other types of permanent improvement and construction necessary to render the property under the control of said park commissioners usable for the enjoyment thereof as public parks, parkways, boulevards and pleasureways. (Emphasis added.)

The Park District is also specifically authorized to acquire, construct and operate revenue-producing recreational facilities.[23] To do so, it must adopt a plan.

If an analogy can be drawn to highways in Illinois, much in the way of Value Capture might be accomplished. Reference has already been made to some limited powers of supplemental condemnation. Depending upon the entity involved, the ancillary commercial activities authorized in connection with highway construction may be considerable. The Highway Code provides for condemnation by highway authorities for all land necessary for the construction, maintenance or operation of highways including land for extending and widening[24] and including bridges, signs, guard rails, drainage and protective structures and other appurtenances convenient for vehicular traffic.[25] Expressly prohibited in the right-of-way for freeways and controlled access highways are commercial establishments, even for the convenience of motorists.[26] However, toll highways are expressly exempted from this provision.

The Illinois Tollway Commission is established by statute in Illinois to construct and maintain a toll highway system.[27] Its powers to deal with commercial ventures is specifically set out:[28]

To contract with and grant concessions to or to lease to any person, partnership, firm, association or corporation so desiring the use of any part of any toll highways, excluding the paved portion thereof, but including the right of way adjoining, under, or over said paved portion for the placing of telephone, telegraph, electric, power lines and other utilities, and for the placing of pipe lines, and to contract with and grant concessions to or to lease to any person, partnership, firm, association or corporation thereof, so desiring the use of any part of the toll highways, excluding the paved portion thereof, but including the right of way adjoining, or over said paved portion for motor fuel service stations and facilities, garages, stores, hotels, and restaurants, or for any other lawful purpose, except for the tracks for railroad, railway or street railway use, and to fix the terms, rents, rates and charges for such use. (Emphasis added.)

Acting pursuant to such authority the Tollway Commission has leased space to several oil companies for 5 restaurant and 10 gasoline service station establishments both adjoining and over tollways in Illinois. Basic leases provide that the Commission receives a percentage of sales of various products. The leases run for 25 years.[29] The Commission has apparently taken the position that these existing facilities represent the limits of its statutory authority.

The Commission has leased space to a number of commercial restaurant and gasoline service station establishments both adjoining and over tollways in Illinois. The Commission has apparently taken the position that these existing facilities represent the limits of its statutory authority.

Private development on land acquired for public use for another mode of transportation--air--has often been leased by public authorities to private parties for profit. Not only is this true with respect to hangars for private planes, but in the case of O'Hare International Airport in Chicago, the Hilton Hotel opposite the main terminals and numerous restaurant and other concessions are located on such publicly-acquired real property. This is accomplished primarily by

means of leases, some of which provide for the reversion of the structure to public ownership at their expiration.

Finally, note that the Illinois Municipal Code specifically grants every municipality power to deal in air space by means of long-term leases:

> *Every municipality has the power to lease the space above and around buildings located on land owned or otherwise held by the municipality to any person for any term not exceeding 99 years.*
>
> *Every municipality has the power to lease, in the same manner and for a similar term, any space over any street, alley, or other public place, in the municipality, more than 12 feet above the level of the street, alley, or other public place, to the person who owns the fee or a leasehold estate, for a term not less than that of the proposed lease, in the property on both sides of the portion of the street, alley, or other public place so to be leased, whenever the corporate authorities of the municipality are of the opinion that that space is not needed for street, alley, or other public purpose, and that the public interest will be subserved by such leasings. The leasing of such a space shall be authorized by ordinance. In this ordinance the lease and its terms shall be set forth with reasonable certainty.*

The City of Evanston, located immediately adjacent to the City of Chicago's northernmost boundary, may have taken advantage of this provision in its relatively recent dealings with Holiday Inn. Evanston sold both the air and surface rights of a municipal parking lot to Holiday Inn, for construction of a multistory hotel, reserving two floors to the City for parking (presumably replacing that which was given up on the municiapl lot).

The City of Evanston also made plans to construct a terminal development utilizing the Davis Street CTA and C&NW Railway stations. Utilizing the state's Public Building Commission statutes, it was contemplated that a number of private, non-retail commercial uses, like restaurants, would rent space in the terminal, thus helping defray its costs.

Local sources also referred to those statutes in Illinois permitting generally downtown redevelopment.[30] Certain of the statutes require a declaration of blight before such redevelopment can take place. A recent statute appears to obviate this requirement.

SPECIAL BENEFIT ASSESSMENTS

In Illinois, there is no statutory basis for special benefit assessments as we have previously described it in this report. If there were, experts interviewed expressed some considerable reluctance to recommend such a procedure due to:

1. The difficulty in defining the district;
2. The difficulty in assessing the benefit in monetary terms.

Moreover, the question of the amount to be derived for all the trouble was raised.

We were referred to CUTD for an example of a taxing district created for the sole purpose of financing a rapid transit extension. Bond counsel indicated the borrowing position of such an entity was considerably enhanced because it was given the power to tax.

CUTD is apparently only one entity recently created under statutory provisions providing for special tax districts for specific public purposes. It may well be that a contemplated State Street pedestrian mall in downtown Chicago will go forward in the same manner. It is fair to say these have been so far favorably received.

JOINT DEVELOPMENT

Illinois has a relatively new state constitution expressly authorizing intergovernmental cooperation by means of a local government article:[31]

> *§10. Intergovernmental Cooperation*
>
> *(a) Units of local government and school districts may contract or otherwise associate among themselves, with the State, with other states and their units of local government and school districts, and with the United States to obtain or share services and to exercise, combine, or transfer any power or function, in any manner not prohibited by law or by ordinance. Units of local government and school districts may contract and otherwise associate with individuals, associations, and corporations in any manner not prohibited by law or by ordinance. Participating units of government may use their credit, revenues, and other resources to pay costs and to service debt related to intergovernmental activities.*

(b) Officers and employees of units of local government and school districts may participate in intergovernmental activities authorized by their units of government without relinquishing their offices or positions.

(c) The State shall encourage intergovernmental cooperation and use its technical and financial resources to assist intergovernmental activities.

The main point of the Article appears to be to validate such cooperative efforts, rather than grant new powers. That is to say, it is unlikely a group of agencies acting under its auspices in concert could do more than each individually besides saving some money by economies of scale and sharing in a joint project as apparently occurs under the auspices of building commissions.

It is worth noting that the City of Evanston, the CTA and a private corporation are cooperating in the joint development of an area immediately adjoining the CTA transit stop of Davis Street in Evanston. Included in the plans: parking, vacating some rights-of-way, construction of commercial buildings.

7c Financial

Of all the cities investigated, Chicago currently exercises a mix of Value Capture Policy instruments to some degree. The transit management situation in Chicago is complex, a function of the host of public transit entities involved: namely, the Chicago Transit Authority, the Chicago Urban Transit District and the Regional Transit Authority. Each of these entities has different powers, purposes, and histories. To this extent, the interrelationships of this institutional framework not only makes possible the application of various policy instruments, but also, in some cases, constrains their more intense application.

The CTA, which operates Chicago's public transit, has numerous real estate holdings obtained by acquisition of predecessor private transportation properties. Their real estate department actively leases ground and air rights, sells transit-related properties, and licenses commercial vendors at stop locations. Moreover, the CTA is currently studying participation in a potential public/private joint development located in Evanston, Illinois.

Clearly, some forms of Value Capture are already an established fact in Chicago. What remains unresolved is their potential for more aggressive application. To this end, as one public official relates, the CTA is entering a new era of awareness with increasing response to its impact on community development-----thus, Chicago can be considered an interesting arena for Value Capture.

THE FINANCIAL ARENA

As is the case with virtually all public transportation entities, the CTA's budget proposals are heavily impacted by a continuing high rate of inflation.[32] These increases contribute to operating deficits which have plagued the CTA since 1971. CTA, in this situation, is typical of most older established public transit entities, seeking both service and capital improvements for its patrons. However, unlike some, Chicago is experiencing an upward trend in ridership. In fact, the proposed 1975 budget projects an increase of 13 million passengers or 2.2 per cent over 1974.[33] Such an increase would be a co[illegible] downward trend over the last 25 years. The energy crisis early in 1974 and continuing price increases for gasoline undoubtedly contributed to ridership increase in 1974.[34]

Also, the Chicago Central Area Transit Project and the CUTD were created to permit the removal of the existing elevated structure and extend and improve current rapid transit service by extension to the existing subway system within the central area. Timing, funding and other aspects of the remaining phases of the project have not, to date, been finalized, but the District currently estimates that the entire project will be completed, depending upon funding availability, in 1985 with total costs which may approach $2 billion. Upon completion, it is contemplated that the constructed facilities will become operational elements of the Chicago Transit Authority System.[35]

Like most large scale construction projects, estimates of costs of implementation have vacillated continually since initiation, as well as possible sources of funding. Proposed system construction costs are estimated to be $1.6 billion in 1973 dollars with 80% Federal share and 20% local match funding. These costs have escalated and the CUTD project is foreseen to be built in discrete portions so that after the $2 billion capital investment, the CUTD can pull out. Because of the size of the project, the CCATP has been received with mixed reactions by the Federal government. In fact, the Federal government has

substantially reduced CUTD's request for funds for the current year from $80+ million to $6 million and its construction programs have been delayed.[36] To this end, Value Capture techniques offer an array of potential opportunities to finance such system improvements. However, the feeling is best described as conservative at the CTA. Given their operating deficits and the necessity of going public for needed funding, it is unreasonable to assume that the CTA could invest in any potential profit-making opportunities, according to one expert. In addition, it must be emphasized that transit officials view that any new transit stop development must be justifiable by existing demand for increased transit ridership, not what might be expected.

In short, these considerations briefly sketch the financial arena in which Value Capture would be applied. Any conclusions as to the efficacy of Value Capture to meet these needs rest with the following discussion.

THE FINANCIAL FINDINGS OF VALUE CAPTURE TECHNIQUES

This section presents findings related to the financial aspects of various Value Capture techniques. Across the array of potential techniques, the three functions of finance are considered. First, these techniques are considered investments--an undertaking to realize income. Second, some of these require financing in various degrees to implement. Third, the future earnings stream is considered. These revenues constitute the value recaptured.

Most of these financial aspects are a direct function of the legal mechanisms to acquire, control, or manage transit-related land parcels. The requirements of land assemblage, acquisition, and control in and around transit stop locations is essential to techniques directly related to real property investment and divestment. The reader is urged to recall discussions in the Legal section of the issues of public purpose, supplemental condemnation, air and subsurface rights, and intergovernmental cooperation/joint development--not to mention considerations of monetary transfers and special assessments associated with taxation techniques.

As an overview to the real property techniques certain issues can be mentioned in general concerning the $14,075,590 land assests in balance in 1973 of the CTA.[37] According to one expert, management and administrative staff does not exist to actively pursue real estate development. The charge of the CTA is people delivery, and commercial facilities and installations are considered in relation to the convenience and necessity of the transit district patrons. Thus, the CTA is interested in real estate development only where it affords increased accessibility and ridership potential. While the CTA does not actively pursue development, it welcomes the opportunity to deal with the private sector.

Ad Valorem Property Taxation

In general, ad valorem property taxation represents a means of capturing the financial externality occasioned by the introduction of a fixed guideway rapid transit system through resultant increase in land values. The CTA is without the power to tax. In the case of CUTD, however, this tax is not directed to any particular benefit which might result from the major transportation improvement program, but remains constant and is spread over the wide geographic area of the District.

The CUTD is a taxing district for the purpose of financing and constructing a rapid transit extension in the Chicago central business district. Created and empowered under the Urban Transportation Act, Section 512, Levy and Collection of Tax - Rate specifies the procedure as follows:[38]

> *Any Urban Transportation District organized under the Urban Transportation Act of this Act may levy and collect a general tax for corporate purposes on the real and personal property situated in such district, but the aggregate amount of taxes levied for any one year for such corporate purposes shall not exceed the rate of .10 per cent of the value of taxable property as equalized or assessed by the Department of Revenue. The board of trustees shall determine and certify the amount to be levied and shall return the same to the county clerk.*
>
> *The tax herein provided for shall be levied at the same time and in the same manner as nearly practicable as taxes are now levied for city and village purposes under the laws of this State.*
>
> *All such general taxes when collected shall be paid over to the treasurer of the board of trustees, who is authorized to receive and receipt for the same.*

Moreover, note that these tax receipts can be used directly to finance improvements in the district, to contribute as local matching shares, or other purposes. Further, the

district may levy an additional tax sufficient to meet debt service requirements and provisions of bonded indebtedness, pursuant to Section 512 of the Urban Transportation Act. Thus, according to bond counsel, the borrowing position of such an entity is considerably enhanced because it was given the power to tax.

Financially, this technique is most successful if an efficient assessment procedure is operational with frequent updates. Presently in Chicago, property values are assessed and updated every four years on a parcel by parcel basis. The county is divided into four sectors with one sector updated per annum.

Currently in the district, a general tax levy of somewhat less than 0.1% of the equalized assessed value of the real property in the District was filed in 1974. This tax levy equates to 9¢ per $100 of assessed valuation of real property. A similar levy of approximately 10¢ per $100 of assessed valuation is anticipated for 1975. By December 31, 1974, the balance sheet of the CUTD reported capital in the amount of $2,691,494 from the 1974 tax levy.[39] Part of these tax receipts are intended to repay a short-term, non-interest bearing advance from the City of Chicago in the amount of $319,000.[40] Experts have asserted that within the district the total assessed valuation is $3.3 billion which would imply tax receipts in the amount of $3,300,000 for 1975.

In conclusion, it must be emphasized that this type of taxation is keyed to a fixed uniform rate, an additional levy. Any increases in value would increase the assessed valuation and be captured in whole or part by the levy. A final assessment of this technique is demonstrated in the Section on Application to specific situations.

Special Benefit Assessment District Taxation

The application of this Value Capture technique is being contemplated by the City of Chicago to finance the proposed State Street Mall. Here an assessment district is an explicit fiscal transfer mechanism, typically taxing property, based on benefit, in a defined area to pay for specified improvements or services constructed by bond issues.

As presented in the Legal discussion, special benefit assessment currently in Illinois is without statutory basis. What appears to be the issue is the ability to define districts as well as the difficulty in assessing benefit in monetary terms.

In general terms, the magnitude of the recapture is comparatively less than that of ad valorem taxation, because special benefit tax receipts are typically keyed to the debt service requirements of the bonded indebtedness incurred in developing the improvements which provide the benefits.

TAX INCREMENTS -- MARGINAL VALUE TAXATION

In Illinois, unlike California and Kentucky, there exists no statutory basis or precedent for tax increment financing. The inquiry of this research there focussed on other more relevant techniques and a discussion of tax increments in Chicago will not be made.

Develop/Hold--Real Property

The application of this Value Capture technique is an established fact in Chicago, as presented in the Legal Section. This technique involves the development of improvements around transit stops, with revenues generated by negotiated lease or rental agreements. The magnitude of the income realized is a function of the land uses established by the transit entity. To this end, the underpinning of this technique is the legal ability to acquire, control, and manage transit-related parcels. The key to this instrument is the extent, type, and scale of the development which generates an income.

Considerable evidence exists about the application of this technique in Chicago. The CTA, having acquired transit properties from private entities, also acquired leasehold interests in concessions such as newspaper kiosks, food vendors, and flower shops. Today, according to local experts, concessions are operated on a license basis with some 70 facilities in operation. These facilities generated $500,000 in fiscal year 1974, $425,436 in 1973, and $441,515 in 1972. The magnitude of these receipts is not large, representing less than 1% of CTA's total operating revenue of $186,477,427 in 1974. Most important, however, according to one expert is the application of these revenues. First, these revenues flow back to meet debt service requirements of CTA's trust indenture for acquiring the predecessor rail lines. Second, any surplus flows into the Modernization Fund for capital improvements. Thus, future development of this sort by CTA is considered minimal with the construction of facilities for concessions and licensing of

operators. This is clearly seen as a service to the transit rider and the magnitude of the income generated is a function of this policy.

This policy is more clearly seen in two other examples. According to one expert, at a bus station turn around where unused land might exist, the CTA would not build residential uses, say a few houses, since it offers no potential for increased ridership. Moreover, licenses are usually granted to private home owners for gardens along transit right-of-way. Very little income is derived, but maintenance expense of the property is substantially reduced.

The ultimate assessment financially of this technique is in the type and amount of land-uses that the transit entity can own or acquire for commercially oriented or revenue producing purposes. Pro forma financial analysis in the stop situation application presents a perspective of the range of returns to be made. A potential does exist to produce a high stable income stream. Finally, implementation of this technique may necessitate financing external to the financing for the system costs proper. To this extent, a dim prognosis can be given to the aggressive implementation by the CTA, because of the restrictions in their trust indenture on future borrowing, as shown in the next section. A question remains whether the CUTD could foster a program without outside financial aid also. Consensus did not seem to exist on this issue.

Develop/Sell--Real Property

The application of this Value Capture technique involves the entity developing improvements at the transit stop locations and selling these improvements and facilities to realize capital gains. Based on the points discussed for the Develop/Hold technique, the application of Develop/Sell received the poorest reception by experts inverviewed. The position was that this technique is not directly related to the service and convenience of the transit rider as well as offering little potential for increasing ridership of CTA.

Hold/Sell--Real Property

In this situation, a transit entity acquires all the land around a station location, holds it until the value appreciates to some optimum, and then resells it, keeping any profits to repay costs of developing the system improvements.

Application of this technique is an established procedure for CTA. Sale of real estate produced proceeds for instance, in 1975 in the amount of $2,256,000 and over a 10 year period from 1964-1974 garnered $9,656,000.[41]

According to one expert, surplus land is sold at fair market value. A public bid process is utilized; however, the CTA can turn down offers below appraised market value.

The necessary underpinning for this instrument is the legal ability of a transit development entity to acquire transit related land parcels, coupled with the ability of the entity to divest itself of interest in the acquired parcels.

There appears to be little difficulty in a transit entity divesting interests in its land parcels even at a profit. In fact, the CTA ordinance authorizes disposition by sale in Section 11.[42] Moreover, disposition of air rights are deemed plausible, according to one expert. However, this instrument is not without pitfalls. Aside from problems related to determining the extent and scale of land holdings which can be disposed, the primary pitfall and constraint is the flow of these proceeds after disposition. The Annual Report of the CTA expresses the problem best:[43]

> *(f) Sale of Property -*
> *The Authority has consistently followed the practice of not recognizing any gain on the sale of property if the property being sold was part of the transportation property acquired from predecessor companies. During 1972, the proceeds of the sales, net of related expenses, were transferred from the transit revenue fund to the modernization fund. These funds were then used to reimburse the working cash account for property costs which had not previously been charged to the depreciation reserve or modernization fund.*
>
> *During 1973, the Authority deposited part of the proceeds from sales of property in the modernization fund and part of the proceeds in a segregated depository account not under the control of the Revenue Bond Trustee. At present, a question of legal interpretation exists as to the priorities which apply to any moneys deposited in the modernization fund. Included in the motion of March 20, 1974, to the Circuit Court of Cook County, is a request by the Revenue Bond Trustee to have the Court declare that all moneys received by the Authority from the liquidation, conversion or disposition of*

any property must be deposited with the Revenue Bond Trustee in the modernization fund and declare that the Revenue Bond Trustee has first priority to and a vested claim against all moneys in and hereafter deposited to the modernization fund whenever moneys in the transit revenue fund may be insufficient to make the required deposits to the interest funds, sinking funds and revenue bond reserve funds. The Authority is of the opinion that moneys in the modernization fund should be used for capital expenditures.

At present this question is still not settled. This problem could negate the motive for using Value Capture to realize income from the appreciation in land values to defray system improvement expenditures.

It is anyone's guess as to whether the CUTD could implement this instrument. In Chicago, it appears difficult to market bonds to acquire transit-related land parcels whose future sale provides security for debt service repayment. The major pitfall here, not to mention marketability, is the declining influence of transit accessibility in land values in Chicago. A study of land values in Chicago over the period 1910-1960 indicates that the importance of accessibility in the determination of land value has declined sharply over the decades. In 1910, the two most important factors affecting the value of land were proximity to the central business district and proximity to elevated stations. By 1930, these factors had already begun to decline in importance, although the elevated system reached its peak size in that year. In 1960, proximity to elevated stations was no longer a relevant factor in explaining land value, and distance from the central business district, though still significant, was much less important.[44]

In fact, major direct access points from elevated stations in the Loop to commercial facilities, such as Marshall Field and Co. have been closed. This results in the likelihood that no increase in value will be manifested from existing transit facilities in the city. Thus in general, while the potential for derived income can be considered high from this technique, its application is limited to new transit route development and the financial policies of the entity employing its use. It also should be observed that substantial earnings are generally lump sum in nature - unless one considers the regular divestment of small holdings as a course of operational procedures - a fiscal "housekeeping" function. This yields comparatively small proceeds in each accounting period and is not done directly for the purpose of recoupment as considered in this investigation.

Lease--Real Property

Economic consideration of the various Value Capture techniques imply that recapture via leases is substantial. Here the transit entity has the ability to enter into long-term ground leases or air rights leases of transit-related development interests.

The application of this technique in Chicago is an established fact. The CTA's 1974 Budget reports income from rental of real property in the amounts of $435,000 and $439,000 for fiscal years 1975 and 1974 respectively.[45] Yet, this return is seemingly insignificant compared to total system generated revenues projected at $198,223,000 and $194,930,000 for fiscal 1975 and 1974 respectively; thus comprising less than 3/10 of 1 percent of total revenues.

The CTA ordinance in Chicago specifically addresses and authorizes the disposition of surplus land parcels. For example, one expert cited the lease of air rights at a profit to the Oscar Meyer Company for elevated pedestrian walkways over CTA right-of-way to connect buildings on either side. Further, in Evanston, Illinois, according to another expert, the City of Evanston leases CTA right-of-way for approximately $300/year to form with other adjacent land parcels the site for their Hawthorne Project, a redevelopment area. By such development, the CTA is expected to experience increased ridership. This condition is CTA's prerequisite for such a joint development with the City of Evanston. In short, CTA's posture is the recognition that they are holding surplus development rights, land which when developed for commercial uses can induce increased use of transit facilities.

In financial terms, an illustration of this instrument can be understood by example application and pro forma financial analysis in the following section. In general, maximum gains will be realized through escalation in the lease contracts keyed to changes in land valuation or rental value at specified intervals, a revaluation lease contract. Given that these development rights are expected to increase in value, lease revenues would then reflect this change.

Provided that a market exists for transit related parcels, and that a transit development entity may initially secure title to such parcels, the income capacity of this technique

looks good. There would be little variability in flows expected because of the long-run term of such leases for surface or air development rights.

Participation--Real Property

Under this Value Capture technique, the transit entity contributes land parcels or development rights to some type of joint venture wherein a development entity applies its capital to construct facilities. The transit development entity would receive and share the realized income, based on a pre-set formula. This technique's premise is the ability of the entity to enter into contract with other entities, public and private. Preceding legal discussions have paved the way for joint development, referencing the new state constitution expressly permitting intergovernmental cooperation (Article VII, Section 10). The application of this instrument is exemplified in the Chicago area by the proposed Transportation Center in Evanston.

This proposal is for the development of a multi-modal transportation center in downtown Evanston at the CTA's Davis Street stop and is diagonally adjacent the proposed Evanston Center project, a new regional commercial center. The development situation is complex because of the two different projects and the consideration for joint development and transit-use opportunities in each. The Evanston Center involves a venture between the City of Evanston and Westcor, a private developer. The Davis Street Transportation Center involves a number of participating entities. These entities include: the CTA, RTA, the City of Evanston, and the Chicago and Northwestern Railroad (CNW). The major issue of this proposal is the extent that these two developments can be interrelated. This considers various concepts of the CTA giving up or sharing some of their right-of-way and/or permitting intrusions over the air space of the right-of-way.[46]

EVANSTON AREA Fig. 7/2

The development situation unfolds as follows. The Transportation Center is a primary concern of the CTA to provide better service to their transit patronage by tying in various intermodal uses -- buses, transit, and commuter railroad.

The CTA seeks to dispose right-of-way adjacent to the Westcor project to provide a source of funds and increased financial leverage for their transportation center. Note that the potential for joint development exists here, but is currently not at an optimal state. In this proposal, the CTA is merely transferring land to the City of Evanston, with no participation in upgrading these sites. In the funding agreement with the City, the CTA's right-of-way is deeded to the City in exchange for land of equal value in the Transportation Center complex at the Davis Street stop. Moreover, the agreement between the CTA and the City for the acquisition of this right-of-way is not considered a land swap, but rather, a receipt of cash payment in lieu--designated for use of acquiring land in the Transportation Center. The premise is that the City will provide a dollar amount, cash equivalency, to be used in acquisition of properties of a Transportation Center for the Davis Street stop. This land when assembled with publicly acquired lands west of the CTA right-of-way will be developed by a private developer, Westcor. Title is conveyed to the City, with a promissory note, due on demand, issued. The cash is equivalent to a $500,000 line of credit. Westcor leases the land from the City and pays a debt service equivalence to the City, the City in turn uses this source of funds to pay debt service on a bond issue for land acquisition.

Much speculation can be made from these proposals and degrees of connectivity and linkage between the Evanston Center and the Transportation Center. As the Davis Street stop is diagonally across the site from Westcor's proposal, preliminary design considerations have been given to pedestrian bridges linking the two projects and for actual location of the center for immediate ingress and egress from the Westcor development. The Transportation Center will be separated physically from the commercial development, only seeking the increased ridership potential which is expected to be generated by this development. However, while some ancillary retail facilities will be included in the Transportation Center, no intent exists for a participation in revenues from this project. In short, the CTA seeks a disposition of property, right-of-way, needed for the Westcor proposal to provide for land assemblage necessary for

their Center. The CTA projects 12,000 additional transit riders, thereby generating increased fare box revenue. The cost of development for the Transportation Center is estimated at $2,500,000 and the following alternative funding strategies were considered.

1. Addition of an amendment to the CTA's current Grant --ILL.-40. This is an 80% federal grant with 20% local match. Under this plan, the berm beneath the CTA r.o.w. would be removed, a new structure built, and remodeling of the existing CNW railroad station. Station remodeling is expected to run $1,000,000. There has been some question whether the CTA would provide monies necessary for construction of the necessary cassons to allow eventual development of air rights. Most experts are in agreement that small ancillary commercial facilities should be provided and would meet the needs of their transit passengers. Under this scenario, the advantage is that the necessary background information has been done for the original grant application. The disadvantage is the possible holdup function of other low priority projects funded by the grant.

2. Apply for a New Grant. This would be a resubmittal as a current request for the Federal funds with the City of Evanston providing the local match. The decision rests with the City of Evanston and their determination that such development is a community objective, especially the remodeling of the existing railroad station. The City will have to determine the extent of their contribution to the project. The major advantage of this strategy is that this grant would have no effect on the current grant application process.

3. RTA seek new grant. In this situation, the RTA would provide coordination and administrative services for all the participants--the City of Evanston, CTA, and Chicago and Northwestern Railroad (CNW).

4. FAH--Federal Aid for Highways.

5. Amtrak Improvement Act (Federal Register, Volume 40, no. 133, Thursday, July 10, 1975) provides grant monies for railroad stations, worthy of historic preservation, to be remodeled for use as multimodal split between different transit systems. This source provides 60% with 40% local match. In short, this would involve the joint venture with the CNW to redevelop the existing RR station and related uses on the premise of historical preservation and then only in terms that this involves a transfer of funds for use to intermodal exchanges of systems. It is worth noting that in the existing railroad station a concession has been granted for restaurant facilities.

In financial terms, an application and evaluation of this Value Capture technique is presented by pro forma analysis in the section following in discussion addressing the Evanston site. It should be noted that this is not a pro forma analysis for those develcpment proposals currently under consideration in Evanston.

SOURCES AND USES OF FUNDS FOR VALUE CAPTURE POLICY

The intent of this section is to investigate sources of financing some of the Value Capture techniques in Chicago, especially those relating to real property. Central to this is the need to finance at the front end both capital improvements, new transit lines, and land acquisition and construction for various stop-related non-transit improvements. To this extent, the situation in Chicago is unique because of the public transit entities involved. The CTA, already having an established fixed guideway system and real estate holdings, could extend its Value Capture application to realize income for new additions, improvements and/or operating expenses. Front-end money can be provided for future needs because of the existing asset base.

On the other hand, the CUTD, embarking on new system improvements, does not have this unless CTA generated revenues are used. This is unlikely according to one expert. Thus, the CUTD would need front-end capital for both fixed guideway construction and Value Capture technique application. The following discussion presents an overview of funding sources for these entities or any transit development entity in Chicago. From this perspective, it is important to note that the RTA is the administering agency for these public transit entities' sources and uses of funds.

The CUTD's project of constructing new subway lines in the Loop area of Chicago has had initial project funding from numerous sources including federal and state grants, notes payable to local banks, city advances, and tax receipts. These funds are currently being applied to initial project development studies. The proposed system construction costs is $1.6 billion in 1973 dollars, anticipated to be financed with 80% federal funding and a 20% local match to be met by District tax levies and bond issues.[47]

As pointed out in preceding discussions, to accomplish its corporate purpose, the District is further empowered to levy and collect for its general corporate purposes, taxes on the real and personal property situated within the District in an amount not to exceed one-tenth of one percent of the assessed valuation of such property, and to issue bonds, the principal amount of which, when considered together with other outstanding indebtedness of the District, shall not exceed five percent of the assessed valuation of all taxable property within the District. When issuing such bonds, the District must also levy a general tax on the real and personal property within the District in an amount sufficient to meet all interest requirements on such bonds and also to retire the bonds serially within twenty years from their date of issuance.[48] These conditions are further articulated in Section 513, The Urban Transportation Act, stating:

> *The district may secure the necessary funds to finance all or part of the cost (including the cost of reimbursing utilities under Section 11) of acquiring, establishing, constructing, developing, expanding, extending or further improving the transportation facilities of the district, as authorized in this Act, through the issuance of bonds.*[49]

According to one expert, it is unlikely that these funds so acquired could be used only for transportation facilities with some ancillary commercial uses. The CUTD currently has $500-$600 million of bonding capacity or via tax levies could expect to receive $3.5 million annually, according to one source. Yet, current local financial thinking is directed toward using the City's bonded indebtedness, rather than extensive taxation.

The CTA relies strictly on the following external sources of funds: (1) the RTA, the state can but does not collect and pass through 3/32 of 1% of gross taxable sales and RTA can but does not collect a levy of 5% on fuels; (2) UMTA capital grants; and (3) the City of Chicago. The crucial problem confronting the CTA and a pitfall for its increased application of Value Capture is the fact that the modernization fund is currently in ligation, and this source is frozen for capital improvements; hence, capital improvements are funded under UMTA legislation.

Two points are noteworthy. First, CTA's limited budget and operating deficit would not afford CTA the potential to do much real estate development as envisioned in Value Capture. Moreover, the use of UMTA grants was felt to be inconceiveable as a source for development purposes. It was observed that the necessary funds would have to be generated internally for development purposes other than transit improvements.

Second, the trust agreement securing the CTA's revenue bonds presents a major constraint. To finance the acquisition of predecessor private companines and for extending or improving the transportation system, the CTA issued revenue bonds which were secured by a Trust Agreement, dated July 1, 1947, with the First National Bank of Chicago, as trustee.[50] This trust agreement prescribes the order of precedence which shall be followed in applying revenue of the Authority as: (1) revenue bond interest funds, (2) depreciation reserve fund, (3) revenue bond amortization fund, (4) operating expense reserve fund, (5) municipal compensation fund, and finally (6) the Modernization Fund.[51] Legal action has been taken as to the above priority, seeking to have transfer made from these reserve funds to working cash accounts.

The significance here is not only the low priority of the Modernization Fund, but also the court case considering the flow of revenues from real estate dealings, sale and rental of CTA's development rights, into the Modernization Fund in lieu of repayment for the trust indenture. The decision rendered by the appellate court in the case, CTA v. State of Illinois, upheld the trust agreement. Currently, the case is under appeal to the Supreme Court of the State of Illinois and as such the Modernization Fund is frozen. According to one expert, this trust indenture and court case places the CTA in the position of not being able to use revenue bonds for future land acquisition and development purposes, but also substantially precludes any such revenues so derived to be used in defraying the costs of any capital improvements.

FINANCIAL SUMMARY OF VALUE CAPTURE APPLICATION

Discussion, thus far, about the financial aspects of Value Capture in Chicago have been directed at general problems and opportunities stemming from the application of any of a number of techniques. It, for the most part, has been based on a reporting of investigations--recent reports, interviews with key sources and the like--in the City. This approach will not allow for the examination of any situation to much detail - thus the reason for example Value Capture application to several selected sites associated with transit improvements. This section discusses the results of pro forma analyses of six al-

ternative development and financing schemes at three selected sites and makes brief conclusions based on the findings therein. Overall, these example settings allowed for the application of the develop/hold, land lease, ad valorem taxation, and participation techniques discussed in general in the preceding sections.

Assumptions:

Basic Assumptions used in the pro forma analyses in Chicago are similar to those used in Los Angeles and Louisville. They include:

1. Cost of long-term borrowing for the transit development entity was assumed at 6% except for the participation alternatives where the private developer was a major partner (at 80% and 60% respectively in the two examples) - 9% was used. The term on these was 25 years.

2. Accumulated cash returns from the project were computed for a 25 year period.

3. Unless otherwise stated, an annual inflation rate of 5% was assumed for both project gross revenues and operating expenditures.

4. All data for land uses included in the example developments were in 1975 dollars.

5. Transit segment length was computed as the distance on both sides of the stop along the transit alignment to the midpoint of the distance between that stop and the next.

   The transit system portions shown in Figure 7/1 were assumed in the design considerations at each stop. Alignments, ridership, and service improvements were based on past published data for the CCATP and the Evanston Area.[52]

6. Transit segment costs were based on cost estimates recently published for the CCATP.[53] In this case overall cost estimates published were expressed in unit cost per mile then multiplied by the segment length. (The average unit cost was approximately $34M/mile.) In the case of Evanston, data on line and r.o.w. improvements was not available for this analysis. In no case was the cost of system hardware assumed.

In several of the examples, transit stations or station related facilities are similar to those proposed by CTA or the CUTD. It should again be made clear that the designs proposed herein and the accompanying financial results were computed for an assumed transit development entity, not the CTA or CUTD per se.

Investment Yield

Overall conclusions based on the example development situations (depicted in Section 7-D) are difficult to draw because of the diverse nature of the sites selected. The stop and commercial developments examined along Monroe Street utilizing street level and subsurface levels of existing structures lost between $5 million and $9 million over the 25 year development period while closeby, north of the Loop in a relatively underdeveloped area

STOP SITUATION	DEVELOPMENT PROGRAM	VALUE CAPTURE TECHNIQUE APPLIED	LAND COST ($/sf)	PARCEL SIZE (ksf)	DEVELOPMENT CAPITAL COST ($X1000)	NET ACCUM. CASH FROM DEVELOPMENT ($X1000)	NET PRESENT VALUE (DISC@ 8%) ($X1000)	TRANSIT SEGMENT LENGTH (MI.)	TRANSIT SEGMENT COST ($X1000)	PERCENT COST DEFRAYED W/ ACCUM. CASH	PERCENT COST DEFRAYED W/NET PRES. VAL. @ 8% DISCOUNT
Chicago - Monroe I (Monroe @ Wells)	Stop, Commercial	Develop/Hold	5.	37.	8,150.	-5,600.	-3,410.	0.1	33,600.	-16.6	-10.1
Chicago - Monroe II	Stop, Commercial	Develop/Hold	5.	0.	6,200.	-9,310.	-4,520.	0.1	33,600.	-27.7	-13.4
Chicago - Grand I (Fairbanks Ct. @ Grand Ave.)	Stop, Parking, Office, Commercial, Health Fac., Housing	Develop/Hold, Land Lease	30.	370.	17,510.	148,270.	54,320.	1.3	35,230.	420.8	154.2
Chicago - Grand II	Stop, Parking, Commercial, Office, Health Fac., Housing	Develop/Hold, Land Lease, Ad Valorem Taxation	30.	309.	42,440.	88,700.	27,320.	1.3	35,230.	251.8	77.5
Chicago - Evanston I	Stop, Parking, Commercial	Participation (10% Partner)	0.	122.5	4,720.	1,470.	470.	-NC-	-NC-	-NC-	-NC-
Chicago - Evanston II	Stop, Parking, Commercial, Housing	Participation (20% Partner)	0.	184.5	21,920.	12,670.	4,050.	-NC-	-NC-	-NC-	-NC-

SUMMARY AND COMPARISON - INVESTMENT ANALYSIS RESULTS

Fig. 7/3

of the city the development examined accumulated between $6 million and $17.5 million over the same period using the develop/hold-land lease and develop/hold-land lease-ad valorem taxation techniques respectively. (The Monroe Street development assumed develop/hold only - see Figure 7/3.) One should note that approximately 1,937,000 square feet of stop, parking, commercial, office, health facility, and residential uses were included in the development program for this stop compared with a range of 78,000 to 132,000 square feet at the Monroe and Wells Street stop.

In contrast was a range of cash accumulated from a transit development entity's participation in the Evanston location of $1.4 million to $12.7 million over a 25 year project life.

In terms of net present value of the projects for Chicago, a range from -$4.5 million to $54 million was observed with a discount rate of 8% assumed. Thus, overall between 0 and 150% of transit system segment costs could be defrayed using Value Capture, based on the Monroe Street and Fairbanks Court examples only.

Conclusions about site characteristic's/transit investment cost's apparent effects upon the magnitude of recapture cannot be made given the limited number of situations studied in Chicago. It should be pointed out that in the Monroe and Wells alternatives, which both lose money, little or no site acquisition and a development rights cost of $5 per square foot was assumed while at Fairbanks and Grand, a profitable development, extensive site acquisition (300-400,000 sq.ft.) at square foot costs of $30 were considered. In both schemes, transit segment development costs were similar.

Impact of Inflation

As called out in the list of assumptions an inflation rate of 5% was assumed in the proforma analyses. Figure 7/4 examines the results of proforma evaluation of each development example in Chicago under assumptions of 3%, 5% and 8% annual inflation.

Considering the Monroe Street and Fairbanks Court alternatives only, the range of defrayment (based on accumulated cash) of system costs is between -30% and 100% with 3% inflation assumed, -28% and 420% with 5% and -23% and 1155% with 8% respectively.

Figure 7/4 also presents internal rates of return which vary from -3.5% to 12.6% across the three inflation rates for develop/hold applications and 19.9% to 96.8% on land or air rights leases. Lease returns are comparatively higher due to less initial investment by the development entity. It is clear that assumptions about inflation has a substantial impact upon these examples as well as those investigated in Los Angeles and Louisville.

Income Stream

Discussions of each technique earlier considered the flow of returns over time within

STOP SITUATION	TRANSIT SEGMENT ESTIMATED COST ($ X 1,000)	3% INFLATION ASSUMED ACCUMULATED CASH FROM PROJECT ($ X 1,000)	INTERNAL RATE OF RETURN (%)	PERCENT TRANS. COST DEFRAYED	5% INFLATION ASSUMED ACCUMULATED CASH FROM PROJECT ($ X 1,000)	INTERNAL RATE OF RETURN (%)	PERCENT TRANS. COST DEFRAYED	8% INFLATION ASSUMED ACCUMULATED CASH FROM PROJECT ($ X 1,000)	INTERNAL RATE OF RETURN (%)	PERCENT TRANS. COST DEFRAYED
Chicago - Monroe I (Monroe @ Wells)	33,600.	-8,040.	-3.5*	-23.8	-5,600.	-4.4*	-16.6	-110.	-6.1*	-.4
Chicago - Monroe II	33,600.	-9,970.	-1.1*	-29.6	-9,310.	-1.5*	-27.7	-7,810.	-2.3*	-23.2
Chicago - Grand I (Fairbanks Ct. @ Grand Ave.)	35,230.	35,370.	.8* 19.9**	100.0	148,270.	1.1* 39.9**	420.8	408,280.	1.8* 65.8**	1,155.0
Chicago - Grand II	35,230.	31,070.	8.3* 28.3**	88.4	88,700.	9.9* 58.0**	251.8	220,000.	12.6* 96.8**	624.0
Chicago - Evanston I	-NC-	860.	14.3*	-NC-	1,470.	16.3*	-NC-	2,860.	19.4*	-NC-
Chicago - Evanston II	-NC-	2,280.	13.2*	-NC-	12,670.	15.3*	-NC	24,590.	18.3*	-NC-

* internal rate of return computed on develop/hold portion of project.

** internal rate of return computed on lease portion of project.

INFLATION EFFECTS - INVESTMENT ANALYSIS RESULTS

Fig. 7/4

STOP SITUATION	VALUE CAPTURE TECHNIQUE APPLIED	DEBT SERVICE SYSTEM SEGMENT COST ($ X1,000)	ANNUAL DEBT SERVICE REQMTS. ($ X 1,000)	YEAR 1 YEAR 1 CASH FLOW ($ X 1,000)	PERCENT OF DEBT SERVICE DEFRAYED	YEAR 5 YEAR 5 CASH FLOW ($ X1,000)	PERCENT OF DEBT SERVICE DEFRAYED	YEAR 10 YEAR 10 CASH FLOW ($ X 1,000)	PERCENT OF DEBT SERVICE DEFRAYED
Chicago - Monroe I (Monroe @ Wells)	Develop/Hold	33,600.	3,020.	-420.0	-13.9	-370.	-12.2	-300.	-9.9
Chicago - Monroe II	Develop/Hold	33,600.	3,020.	-430.0	-14.2	-410.	-13.6	-390.	-12.9
Chicago - Grand I (Fairbanks Ct. @ Grand Ave.)	Develop/Hold, Land Lease	35,230.	3,170.	2,850.	90.0	2,860.	90.0	4,030.	127.0
Chicago - Grand II	Develop/Hold, Land Lease, Ad Valorem Taxation	35,230.	3,170.	370.	11.6	950.	30.0	2,130.	67.3
Chicago - Evanston I	Participation (10% partner)	-NC-	-NC-	10.	-NC-	20.	-NC-	40.	-NC-
Chicago - Evanston II	Participation (20% partner)	-NC-	-NC-	80.	-NC-	180.	-NC-	340.	-NC-

STREAM OF RETURNS - INVESTMENT ANALYSIS RESULTS

Fig. 7/5

the life of a project. These made it plain that there is a wide range of performance depending upon the instrument selected. Figure 7/5 presents accumulated cash for years 1, 5, and 10 for each of the Chicago alternatives. Overall, all techniques performed increasingly better over time because of the inflationary effect upon the net income stream. Unlike Los Angeles or Louisville, it is difficult to observe differences between mechanisms based on percent defrayment of transit debt service requirements. The best example in Chicago was Fairbanks and Grand I where in year 1, 90% of debt service requirements were met with revenues from land leases and develop/hold properties and in year 10, 127% was defrayed.

(figure 7/5)

Evaluation of Instruments

Discussions earlier attempted to provide a general prognosis for each technique. The example application summarized in Figures 7/3, 7/4, and 7/5 generally corroborated earlier conclusions about modest returns from strict develop/hold - while at the same time evidenced the efficacy of land leases (Fairbanks and Grand) and ad valorem taxation techniques. Participation not only subordinates the development rights to the primary developer but a large portion of the financial returns as well. This is shown in the two Evanston alternatives where the transit development entity was assumed to have only a 10% and 20% equity position respectively. Note that under such a scheme, the development entity would receive about $340,000 annually (by year 10 - see Figure 7/5).

Based on these examples, it can be concluded, as the case with Los Angeles and Louisville as well, that Value Capture application could face a dramatic range for success or failure in Chicago highly dependent upon the site, development types, magnitude, and Value Capture techniques employed. This, combined with restrictions on sources and uses of funds described in the general financial discussions, provides a less than optimistic prognosis financially for Value Capture in Chicago.

7d Community Design Findings

Stop application examples for Chicago were selected to contrast with those in Los Angeles and Louisville. Aside from this fact, they are representative of several urban development settings including very highly developed core development, central area redevelopment, and older suburban community redevelopment.

Based on these examples, overall community impacts from transit related development were less significant than those documented in Louisville and Los Angeles. This may well stem from the fact that mass transit and intense development levels are commonplace in Chicago. In the Monroe Street example impacts from transit related development were very small with major benefits stemming from improved activity patterns, little or no demolition or relocation and improved noise conditions in the Loop. Negative impacts are minimal and limited to the nuisance of construction congestion. The net gains here are more clear cut than any stop example in this investigation.

Residential environment opportunities were examined in the Fairbanks and Grand alternatives and the more aggressive development alternative in Evanston. These generally raise income levels of the area as well as levels of employment opportunity related to supporting office and commercial facilities.

In all locations, projects could be considered redevelopment oriented, usually converting marginally used land to higher forms of use. Only in the Evanston examples was a form of participation of public and private entities considered for the purpose of urban redevelopment.

Overall, it can be concluded that benefits from Value Capture application highlighted by increased access and mobility outweigh the detriments in terms of the community impact, yet due to overall densities of development prevailing these are seemingly less significant. By contrast, financial results from Value Capture are mixed across the stop locations as discussed in the preceding section. Detailed results from pro forma analysis are presented in discussion of each stop example.

CHICAGO: PROTOTYPE STOP CONTEXTS SELECTED

The proposed Monroe Street subway line represents an opportunity to evaluate Value Capture potential in one of the most highly developed areas in America: The Chicago Loop. The stop is illustrative of the problems of expensive subsurface construction in a major Central Business District context, where community impact is seen almost exclusively in terms of employment, shopping and visitor populations rather than residents.

The second Chicago area selection was the subway concourse between Illinois Street and Grand Street on Fairbanks Court, just north of the Chicago River from the Loop. The Fairbanks and Grand area represents CBD related, institutional and residential prototypes, in a context where large land areas are vacant or suitable for redevelopment. Community impact is therefore directed, as at the USC-Exposition Park area in Los Angeles, to a wide variety of interest groups and issues.

The final Chicago stop, the Davis Street station of the CTA in Evanston, again represents at CBD context, but this time in a smaller, outlying municipality. Unique to the Evanston stop is the fact that the transit investment is already in the ground, with the result that study focuses on the ability to apply Value Capture Policy after the fact, so to speak. Some vacant land is available, and other substantial developments are proposed. As with several other stops, a wide variety of groups are affected, and community impact deals with a wide range of effects.

Monroe Street at State Street

STOP CONTEXT

Chicago as a city was selected for study due to its large size and high degree of development, and within Chicago, the Monroe Street subway stop in the vicinity of the State Street subway was selected for an intensive look at Value Capture in the core of a highly developed CBD area.

The most recent CUTD plans for Monroe Street indicate construction of a subway located just below the existing street right-of-way, with access from entrances located in sidewalk areas created by narrowing the Monroe Street traffic paths.[54] Interchange is provided with the State Street subway but no kiss-and-ride, park-and-ride or other modal transfer facilities are anticipated. The stop is almost exclusively a destination point.

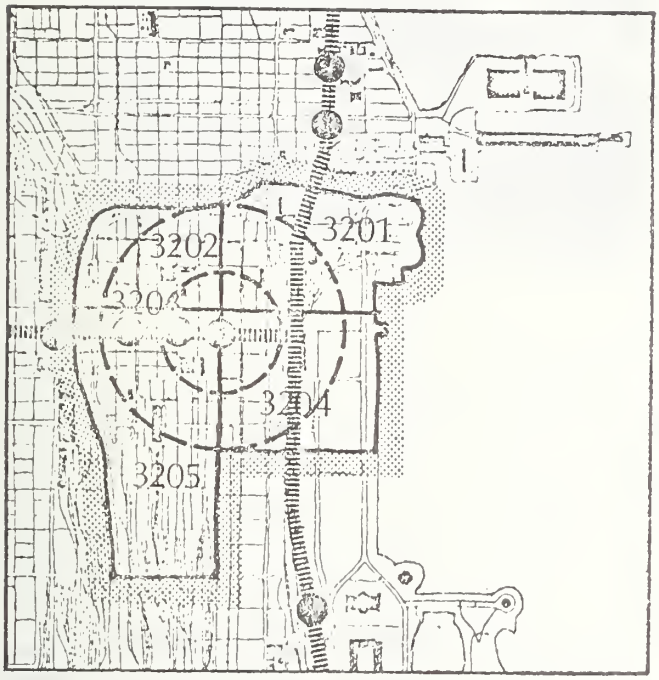
Environmentally, the area round Monroe Street is a totally man-made environment, and suffers from high levels of air and noise pollution. Problems with sewer system capacity and other infrastructure elements are significant. Natural amenities are absent from the street level of the inner loop, but views from the upper floors are spectacular.

In terms of resident population, the loop area surrounding the Monroe Street Subway represents only minimally a residential area. The five census tracts contiguous to the line house only 2857 residents in 1604 housing units. Family size is very small (1.1 persons per unit), and there is a low proportion minority residents (7%). Less than 1 percent of the units are owned; 90 percent are rented and almost 10 percent are vacant year round. The elderly population is high, about 25 percent compared to a city average of 8.8 percent. The number of children is extremely low, only 3 percent.

In terms of stability and quality as opposed to the above descriptive indicators, there is extremely large variation between tracts. The basic split is between a high income, highly educated populace in the

northeast part of the loop, and a low-income, high percent poverty, poorly educated group in most of the rest of the area.

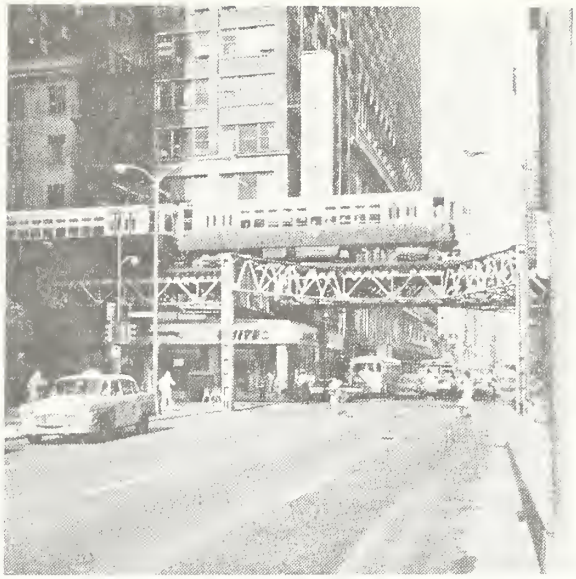
Generalizations on these characteristics for the whole area are of little value due to the wide discrepancies and small populations. Community impact and descriptive indicators appear to vary on a block-by-block or building-by-building basis, as a single apartment tower or residential "skid-row" hotel can dominate an entire tract.



MONROE STREET STOP CONTEXT Fig. 7/6

By far the largest interest group for community enhancement in the area is the employment population which must deal with congestion, air and noise pollution, physical hazards and dangers, and other problems. The ability of any conceivable development to measurably change these problems is very low, except for replacement of elevated lines with subway, which should significantly reduce noise levels.

Potential for appreciation in land values in the area remains even with the existence of extremely high prices of $200-300 per square foot in the area.[55] Current development in the loop area is primarily office space, although it is currently overbuilt. The long-range potential for new office demand exists but has been dominated by the prestige building syndrome. Retail commercial facilities serving the office population can be projected to be particularly effective in relation to subway



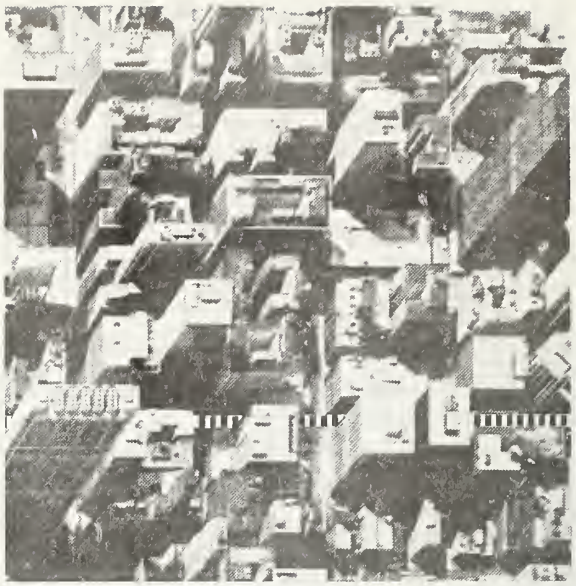
MONROE STREET AT WABASH STREET Fig. 7/7

MONROE STREET AT STATE STREET Fig. 7/8

entrances. Housing, institutional, or hotel uses are rare and little demand exists, particularly in regard to the unsuitability of existing low-development sites along the proposed subway.

VALUE CAPTURE ALTERNATIVE #1

Development Alternative #1 is based on a look at a small portion of the overall Monroe St. distributor subway stop, which all-in-all stretches seven blocks along Monroe Street from Michigan Avenue to Franklin Street. No land acquisition per se is proposed. Instead, sub-surface rights below the existing right-of-way, and in some cases below existing buildings, is acquired by purchase or lease. Direct below grade connections to major buildings are proposed to improve ridership convenience, and enhance the potential for below-grade commercial development. Retail commercial facilities along station mezzanine level and connections to buildings are the major element proposed for Value Capture. The facilities would of necessity need to be developed by the transit entity in conjunction with transit development, and operated to return revenues to the entity.



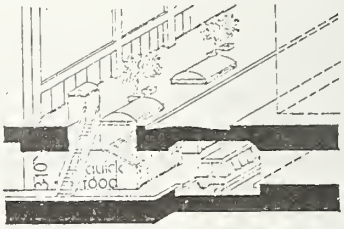
MONROE STREET AERIAL VIEW Fig. 7/9

The illustrative program includes:

	FACILITY			PARKING			TECHNIQUE
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
Ⓣ	Transit Stop	72,000	2	-	-	-	Develop/Hold
●	Community Commercial	60,000	1	-	-	-	Develop/Hold

VALUE CAPTURE ALTERNATIVE #2

Alternative #2 is identical to #1 except that no sub-surface rights acquisitions under existing buildings is proposed, and commercial development is limited to 10,000 square feet, the program includes:



TYPICAL STATION COMMERCIAL FACILITY Fig. 7/10

	FACILITY			PARKING			TECHNIQUE
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
Ⓣ	Transit Stop	72,000	2	-	-	-	Develop/Hold
●	Community Commercial	10,000	1	-	-	-	Develop/Hold

COMMUNITY IMPACTS

Indicators of community quality are expected to show essentially no change due to transit related development as there is no demolition, relocation or new housing construction, and a minimum number of new jobs. Noise pollution will be lowered due to replacement of the Elevated with subway construction. Only to the extent that Value Capture strategies can help implement subway development can this effect be attributed to VCP.

Other effects of Value Capture application are essentially "softer" in nature. Activity patterns may change due to subway as opposed to elevated transit, as well as due to effects of below grade building access in Alternative #1. Retail shopping patterns may be improved in convenience due to relation to transit.

The major effect on access and mobility is the role of stop related commercial development and below grade connections in improving transit convenience, amenities, and possibly safety. Closing of traffic lanes may increase auto congestion and decrease surface mobility.

Little redistribution or net gain in benefits is expected, but such impacts as there are should not be redistributive in nature, either geographically or economically.

Short range subway construction impacts are substantial in terms of congestion and nuisance, but stop related development causes few additional difficulties. Longer range impacts on noise pollution and the quality of the transit environment are expected to predominate.

All-in-all, community impacts at Monroe Street are very small but mainly positive for all parties concerned.

COMMUNITY QUALITY INDICATORS — Fig. 7/11

		AREA MEAN	CITY MEAN	CHANGE DUE TO VCP ALT#1	ALT#2	ALT#3
PRIMARY INDICATORS	% Labor Force Unemployed	7.4	3.4	0	0	
	% Population, 25 or over High School Graduates	54.4	53.9	0	0	
	% Households in Poverty	28.6	10.5	0	0	
	% of Tract with Air Pollution Problems	NA	NA	0	0	
	Median Family Income	6540	9889	0	0	
	Rent as % of Income: $5,000-$9,999 Income	26.0	21.5	0	0	
	% of Units with 1.01 Persons per Room or More	3.1	8.2	0	0	
SECONDARY INDICATORS	% of Tract with Water Pollution Problems	NA	NA	0	0	
	% of Tract with Noise Pollution Problems	NA	NA	L/B	L/B	
	% of Tract without Pollution	NA	NA	0	0	
	% of Households with no Auto	71.9	23.3	0	0	
	Median School Years Completed, 1970	11.4	12.1	0	0	

NOTE: Numerical increase in some indicators denotes improvement, in other cases it indicates worsening of the current status. All indicators are referenced to the immediate stop context.

KEY:
- HH - significantly higher indicator value
- H - somewhat higher
- O - no change
- L - somewhat lower
- LL - significantly lower
- BB - significant improvement
- B - some improvement
- O - no change
- W - somewhat worse
- WW - significantly worse

```
*******************
DEVEL HOLD MRCE1
DATA FOR THIS PART
*******************

DEVEL.USES          2
NO.OF YEARS        25
NO.OF PARTNR        1
YEAR OF SALE       30

% VACANCY         5.00
CAP. RATE        9.80
MORT:VAL.RTO   100.00
MTG.TERM        25.00
% L.T. INTRS     6.00
% RECAP@SALE   100.00
% COMMISSION      5.00
$EQUITY PAID     0.00
LANDCOS.$/SF     5.00
KSF PAR.SIZE    37.00
$ DEMOL.COST     0.00

FOR EACH PARTNER:

PARTNER NO.         1
% SHARE        100.00
% INCOME TAX      0.00
% CAP.GAINS       0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI   72000.
COMMUNITY CC   60000.
```

```
*****************************************************************
DEVEL HOLD MRCE1      ---   INCOME ANALYSIS    ( $ X 1000 )
*****************************************************************

PREV.EQUITY ASSUMED:        0.   COMPLTED EQUITY:          0.
TOTAL COST OF PROJ.:     8149.   COMPLTED MOR-VAL RTO.   100.00
```

PERIOD	1	5	10	15	20	25
OPER INCOME	216.6	263.2	335.9	428.8	547.2	698.4
FIRST-AMORT	148.5	187.5	251.0	335.8	449.4	601.3
INTRST	489.0	450.0	386.5	301.7	188.1	36.1
DEPRECIATION	238.9	211.5	181.6	156.0	133.9	115.0
TAXABLE INC	-511.3	-398.3	-232.3	-28.9	225.2	547.3
TAX BENEFIT	0.0	0.0	0.0	0.0	0.0	0.0
PRETAX C.F.	-421.0	-374.3	-301.6	-208.8	-90.3	60.9
C.F.AFT TAX	-421.0	-374.3	-301.6	-208.8	-90.3	60.9
ROR (CASH)	0.000	0.000	0.000	0.000	0.000	0.000
ROR(CASH) PARTNER- 1	0.0	0.0	0.0	0.0	0.0	0.0
INC.-F&C PARTNER- 1	216.6	263.2	335.9	428.8	547.2	698.4

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 2.470 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 4.370 %

****

COMB. TOTAL CASH FLOW ($ X 1000)

****

PERIOD	1	5	10	15	20	25
DEVEL HOLD MRCE1	-421.0	-374.3	-301.6	-208.8	-90.3	60.9
ANNUAL CASH FLOW	-421.0	-374.3	-301.6	-208.8	-90.3	60.9
ACCUMULATED CASH	-421.0	-1990.9	-3651.3	-4889.7	-5589.6	-5602.3

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	-5602.	-4020.	-3795.	-3592.	-3409.	-3242.

****

DEVEL HOLD MRCE 2
DATA FOR THIS PART

****

DEVEL.USES	2
NO.OF YEARS	25
NO.OF PARTNR	1
YEAR OF SALE	30
% VACANCY	5.00
CAP. RATE	9.80
MORT:VAL.RTO	100.00
MTG.TERM	25.00
% L.T. INTRS	6.00
% RECAP@SALE	100.00
% COMMISSION	5.00
$EQUITY PAID	0.00
LANDCOS.$/SF	5.00
KSF PAR.SIZE	0.00
$ DEMOL.COST	0.00

FOR EACH PARTNER:

PARTNER NO.	1
% SHARE	100.00
% INCOME TAX	0.00
% CAP.GAINS	0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI	72000.
COMMUNITY CC	5000.

****

DEVEL HOLD MRCE 2 --- INCOME ANALYSIS ($ X 1000)

****

PREV.EQUITY ASSUMED: 0. COMPLTED EQUITY: 0.

TOTAL COST OF PROJ.: 6198. COMPLTED MOR-VAL RTO. 100.00

PERIOD	1	5	10	15	20	25
OPER INCOME	58.9	71.6	91.4	116.6	148.8	190.0
FIRST-AMORT	113.0	142.6	190.9	255.4	341.8	457.3
INTRST	371.9	342.2	294.0	229.4	143.0	27.4
DEPRECIATION	185.9	164.6	141.4	121.4	104.2	89.5
TAXABLE INC	-498.9	-435.2	-344.0	-234.2	-98.4	73.0
TAX BENEFIT	0.0	0.0	0.0	0.0	0.0	0.0
PRETAX C.F.	-425.9	-413.2	-393.5	-368.2	-336.0	-294.9
C.F.AFT TAX	-425.9	-413.2	-393.5	-368.2	-336.0	-294.9
ROR (CASH)	0.000	0.000	0.000	0.000	0.000	0.000
ROR(CASH) PARTNER= 1	0.0	0.0	0.0	0.0	0.0	0.0
INC.-FEC PARTNER= 1	58.9	71.6	91.4	116.6	148.8	190.0

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 0.480 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 1.510 %

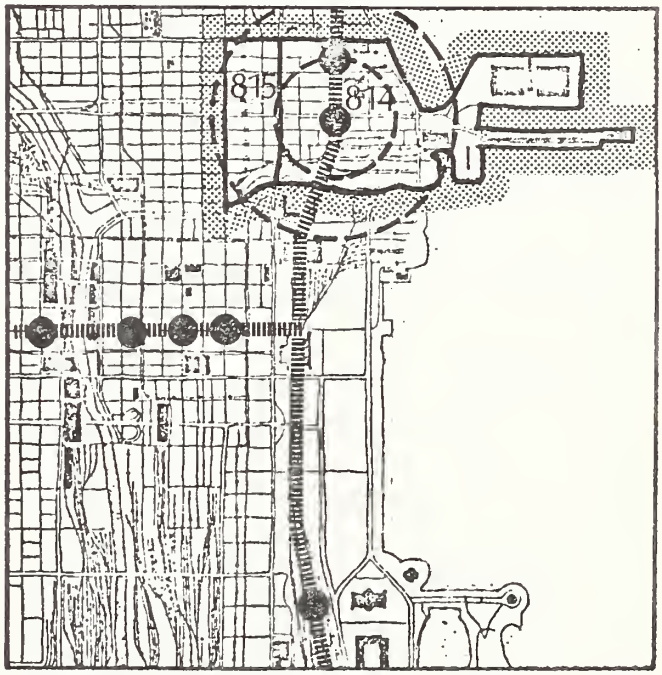
```
*****************************************************************
COMB. TOTAL CASH FLOW ($ X 1000)
*****************************************************************


PERIOD                  1       5      10      15      20      25

DEVEL HOLD MRCE    -425.9  -413.2  -393.5  -368.2  -336.0  -294.9

ANNUAL CASH FLOW   -425.9  -413.2  -393.5  -368.2  -336.0  -294.9
ACCUMULATED CASH   -425.9 -2098.7 -4107.5 -6001.5 -7749.1 -9309.8


$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %      0.00    5.00    6.00    7.00    8.00    9.00
PRESENT VALUE $    -9310.  -5702.  -5252.  -4861.  -4518.  -4216.
```

Fairbanks & Grand

STOP CONTEXT

The Fairbanks and Grand stop, located just to the north of the Loop, again illustrates Value Capture potential in an intensely developed urban area. Unlike the Monroe Street stop, however, the Fairbanks and Grand location is marked by a good quantity of undeveloped and underdeveloped land.

A proposed plan alternative, based on the 1974 CUTD studies, calls for a continuous subway stop with concourse level running from Illinois to near Ohio Street along Fairbanks Court, with a connection to the Erie/Huron stop to the north.[56] The stop may serve primarily as a destination, origin or modal interchange point, dependent to a large extent on future development. Park and ride facilities, for example, are considered as a variable in the application of Value Capture techniques depending on the predicted ability of Fairbanks and Grand to provide a transfer point for access into the Loop. Modal interchanges from other transit elements is expected to be minimal. Also being proposed, however, is the extension of Columbus Avenue across the Chicago River to connect with Fairbanks Court, which will have an additional major impact on street traffic.



FAIRBANKS AND GRAND STOP CONTEXT Fig. 7/12

In terms of the physical environment, current land use is split into four areas: The highly developed Michigan Avenue Commercial Strip to the West, the Medical Center to the North, a mixed use area south

FAIRBANKS COURT AREA Fig. 7/13

FAIRBANKS COURT LOOKING SOUTH Fig. 7/14

of the Medical Center and North of Grand, and a marginal industrial area focusing on Ogden Slip which is characterized by surface parking, and cleared land. Key facilities around the stop include the Time-Life Building, the McClurg Court Apartment Complex, a new Holiday Inn and the Museum of Contemporary Art. The Ogden Slip and Chicago River are currently undeveloped in the area and offer some future potential for waterfront amenities.

Natural environmental characteristics of the area include air pollution problems, and water pollution in area water bodies. Noise pollution is less severe than in the Loop, primarily due to lesser use intensity, and the absences of elevated transit lines. Amenities include views from upper levels over Lake Michigan and waterfront development potential.

In terms of demographic characteristics, the major residential population directly affected by the proposed stop at Fairbanks and Grand is contained in two census tracts housing 6,126 people in 4830 units. Families are small (1.2 people per unit), minority population is low (5.3 percent), the elderly population is fairly large (18.3 percent), and the number of children is very small (less than 3 percent). There are no owned units; 77 percent are rented; and 23.7 percent are vacant. Rent levels and population stability vary considerably between tracts, and as with the loop area, single high rise facilities or residential hotels significantly impact entire tracts. Major effects are felt on a block-by-block basis.

In terms of quality, education levels are higher than average, rents as a percent of income are higher, and percentage of households without autos is high. Other indicators are about average or undependable due to discrepancies in population groups and small numbers of people.

There is some employment base in the area; as the area is on the edge of the "Gold Coast" shopping district, and many people in transit pass through the area. These groups are involved to some extent in the area, but it appears that no dominant group is significantly involved in community enhancement in the area.

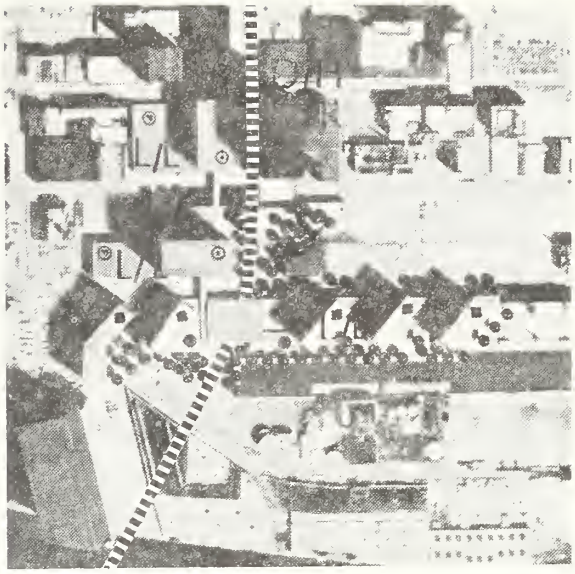
Development potentials for the area are highly speculative due to the lack of dominant current trends. Housing development is being suggested for much of the Ogden Slip/Chicago River area, but the current lack of access and amenities makes this objective difficult.[57]

Office development for the area is limited by loop concentrations of office space, office space to the West of Michigan Avenue, and the prestige building syndrome. Retail commercial space is focused in the Michigan Avenue area, just a little too far away from Fairbanks and Grand to extend to the stop area. Some general or medical-related office space may be feasible, tying into the Medical Center development to the north. As a result, the potential for value appreciation due to improved access may be very good, but is highly speculative.

Value Capture Alternative #1

Value Capture Alternative #1 proposes an aggressive land acquisition program based on present and future parking requirements. 170,000 square feet of land is acquired for present parking needs of 450 spaces for park-and-ride and another 200,000 square feet is acquired for future needs and various remnants. The land is then leased to private developers under controls designed to meet public goals, with the specific provision that an equal number of transit parking spaces be provided in any new development to replace the grade parking that is lost. The station itself is developed under existing street right-of-way.

The use of land-lease as a value capture technique for realizing revenue is based on the need to be able to adjust to changing land values over time, and the inability to directly finance such major construction efforts.



ALTERNATIVE #1 PLAN Fig. 7/15

The illustrative facilities program is based on continuation of the current mixed-use nature of the area, responding to medical center, medium range office needs potential local retail commercial markets, and housing goals. The program includes:

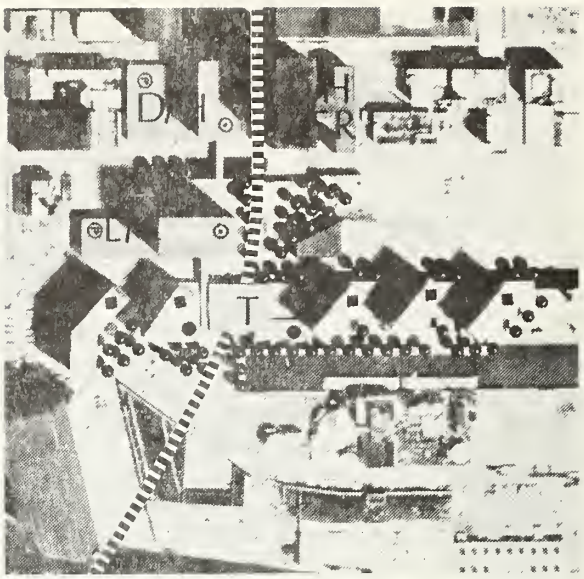
	FACILITY			PARKING			TECHNIQUE
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
Ⓣ	Transit Stop	72,000	2	450	Grade	150,000	Develop/Hol
●	Regional Commercial	120,000	1-3	480	Structured	168,000	Land/Lease
⊙	Mid-High Rise Office	400,000	20	1,600	Structured	560,000	Land/Lease
	Health Facilities (Prof. of.)	200,000	10	800	Structured	280,000	Land/Lease
◆	High Rise Apartments	1,280,000	15	1,720	Structured	602,000	Land/Lease

Value Capture Alternative #2

Development Alternative #2 is based on a somewhat more conservative land acquisition program than the prior alternative, however, more development is carried out by the transit entity. Direct land acquisition consists of 192,000 square feet, which is more closely in line with strictly current parking needs. Again, station construction is limited to subsurface rights below public rights-of-way.

After acquisition of land and assuming availability of funds, the transit entity is considered as developing the transit stop, public, health related office facilities and parking and commercial facilities related to the above on 131,000 square feet of land. A second parcel of 61,000 square feet is leased to a private developer for suitable development. For cash flow analysis, the development was assumed to be speculative a mid-high rise facility. The additional parcel included

in Alternative #1 of 178,000 square feet for residential development was considered for taxing only. The overall result of Alternative #2 is that a test is obtained of quite varied recoupment techniques involving different capital outlays, degrees of development control and returns, while using identical development parti. The illustrative program used in cash flow analysis and urban design models included:



ALTERNATIVE #2 PLAN Fig. 7/16

	FACILITY			PARKING			TECHNIQUE
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
Ⓣ	Transit Stop	72,000	2	390	Struct.	137,000	Develop/Hold
●	Regional Commercial	120,000	1-3	480	Struct.	168,000	Develop/Hold
	Health Facil. Prof. Office	200,000	10	800	Struct.	280,000	Develop/Hold
⊙	Mid-High Rise Office	400,000	20	1,600	Struct.	560,000	Land Lease
◆	High Rise Apartments	1,280,000	15	1,700	Struct.	595,000	Tax

COMMUNITY IMPACTS

Since exactly the same facility programs are proposed in both alternatives the only differences between the two will be due to phasing differences, impacts of techniques; and degree of development control. These differences are not expected to be reflected in any indicators, and are not reflected in design illustrations, and are thus open to speculation.

For both alternatives, however, it would appear that major effects on the community are likely. In terms of social factors, for example, construction over 1,000 units of housing represents a major population change, and as such will affect many community impact indicators. Due to the rent levels required, development should bring in higher income residents, raising median income and decreasing unemployment and percent households in poverty. Major changes in levels and types of activity patterns are expected in terms of shopping, pedestrian, residence, recreation and other activities introduced.

In terms of environmental parameters, increased auto traffic is likely in the immediate area, but may decrease traffic in the loop, resulting in a redistribution of pollution effects. The extension of Columbus Avenue and the 4,050 new parking spaces are major causal factors. In the long run, increased transit use and relocation of industry may have a more positive impact, improvement of streets and pedestrian spaces, the development of waterfront amenities, and elimination of undesirable land uses and facilities should enhance the quality of the area.

The small size of the local resident population indicates that most mobility and accessibility benefits will be for outlying residents using the system, and future employees and residents of the area. Stop related facilities should encourage these improvements.

New facilities are expected to be mainly redistributive, because the project, though large compared to other stops studied, is small compared to Chicago

markets. A net gain in mobility and amenities may be realized, however.

In the short run, demolition and construction disruptions are major, but current utilization is low enough to represent few problems. Long range and secondary impacts are difficult to project in Chicago, but access and amenity improvements should be expected to endure.

Overall, the impact on area residents should be mixed while outside employees and visitors should be benefited, and local industrial uses negatively affected.

COMMUNITY IMPACT INDICATORS — Fig. 7/17

		AREA MEAN	CITY MEAN	CHANGE DUE TO VCP ALT#1	ALT#2	ALT#3
PRIMARY INDICATORS	% Labor Force Unemployed	3.3	3.4	L/B	L/B	
	% Population, 25 or over High School Graduates	72.7	53.9	H/B	H/B	
	% Households in Poverty	10.9	10.5	L/B	L/B	
	% of Tract with Air Pollution Problems	NA	NA	H/W	H/W	
	Median Family Income	6800	9889	HH/BB	HH/BB	
	Rent as % of Income: $5,000-$9,999 Income	27.6	21.5	0	0	
	% of Units with 1.01 Persons per Room or More	6.8	8.2	L/B	L/B	
SECONDARY INDICATORS	% of Tract with Water Pollution Problems	NA	NA	0	0	
	% of Tract with Noise Pollution Problems	NA	NA	0	0	
	% of Tract without Pollution	NA	NA	L/W	L/W	
	% of Households with no Auto	66.8	23.2	0	0	
	Median School Years Completed, 1970	12.9	12.1	H/B	H/B	

NOTE: Numerical increase in some indicators denotes improvement, in other cases it indicates worsening of the current status. All indicators are referenced to the immediate stop context.

KEY:
HH - significantly higher indicator value
H - somewhat higher
O - no change
L - somewhat lower
LL - significantly lower
BB - significant improvement
B - some improvement
O - no change
W - somewhat worse
WW - significantly worse

```
**********************
DEVEL HOLD GRND1
DATA FOR THIS PART
**********************:

DEVEL.USES          1
NO.OF YEARS        25
NO.OF PARTNR        1
YEAR OF SALE       30

% VACANCY        5.00
CAP. RATE       9.80
MORT:VAL.RTO  100.00
MTG.TERM        25.00
% L.T. INTRS     6.00
% RECAP@SALE   100.00
% COMMISSION     5.00
$EQUITY PAID     0.00
LANDCOS.$/SF    30.00
KSF PAR.SIZE     0.00
$ DEMOL.COST     0.00

FOR EACH PARTNER:

PARTNER NO.         1
% SHARE        100.00
% INCOME TAX      0.00
% CAP.GAINS       0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI  72000.
```

```
*****************************************************************
DEVEL HOLD GRND1      ---   INCOME ANALYSIS    ( $ X 1000 )
*****************************************************************

PREV.EQUITY ASSUMED:        0.   COMPUTED EQUITY:          0.
TOTAL COST OF PROJ.:     6037.   COMPUTED MOR-VAL RTO.   100.00

PERIOD                   1       5      10      15      20      25

OPER INCOME           44.6    54.2    69.1    88.2   112.6   143.7

FIRST-AMORT          110.0   138.9   188.9   248.8   332.9   445.4
       INTRST        362.2   333.3   288.4   223.5   139.3    26.7

DEPRECIATION         181.1   160.3   137.7   118.2   101.5    87.2
TAXABLE INC         -498.8  -439.5  -394.9  -253.5  -128.3    29.8
TAX BENEFIT            0.0     0.0     0.0     0.0     0.0     0.0
PRETAX C.F.         -427.7  -418.1  -403.1  -384.0  -359.7  -328.5
C.F.AFT TAX         -427.7  -418.1  -403.1  -384.0  -359.7  -328.5

ROR (CASH)           0.000   0.000   0.000   0.000   0.000   0.000

ROR(CASH)
  PARTNER-     1     0.0     0.0     0.0     0.0     0.0     0.0

INC.-F&C
  PARTNER-     1    44.6    54.2    69.1    88.2   112.6   143.7

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10)   0.230 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25)   1.140 %
```

****

LAND LEASE GRND1
DATA FOR THIS PART

****

DEVEL.USES	5
NO.OF YEARS	25
YEAR OF SALE	30
% VACANCY	5.00
CAP. RATE	9.80
% RECAP@SALE	0.00
% COMMISSION	5.00
% L.T. INTRS	9.00
LANDCOS.$/SF	30.00
KSF FAR.SIZE	370.00
$ DEMOL.COST	374.00

DEVELOPMENT PROGRAM:

STRUCTURED P176000.
REGIONAL COM 120000.
MEDIUM RISE 400000.
HEALTH INSTI 200000.
HIGH RISE AP1280000.

****

COMB. TOTAL CASH FLOW ($ X 1000)

****

PERIOD	1	5	10	15	20	25
DEVEL HOLD GRND1	-427.7	-418.1	-403.1	-384.0	-359.7	-328.5
LAND LEASE GRND1	3279.3	3279.3	4433.3	5906.1	7785.8	10184.8
ANNUAL CASH FLOW	2851.6	2861.2	4030.2	5522.1	7426.2	9856.3
ACCUMULATED CASH	2851.6	14281.5	34401.0	61971.3	99050.8	148266.8

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	148267.	75782.	67444.	60362.	54321.	49145.

****

DEVEL HOLD GRAN2
DATA FOR THIS PART

****

DEVEL.USES	4
NO.OF YEARS	25
NO.OF PARTNR	1
YEAR OF SALE	30
% VACANCY	5.00
CAP. RATE	9.80
MORT:VAL.RTO	100.00
MTG.TERM	25.00
% L.T. INTRS	6.00
% RECAP@SALE	100.00
% COMMISSION	5.00
$EQUITY PAID	0.00
LANDCOS.$/SF	30.00
KSF FAR.SIZE	131.00
$ DEMOL.COST	374.00

FOR EACH PARTNER:

PARTNER NO.	1
% SHARE	100.00
% INCOME TAX	0.00
% CAP.GAINS	0.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI 72000.
REGIONAL COM 120000.
HEALTH INSTI 200000.
STRUCTURED P 585000.

****

DEVEL HOLD GRAN2 --- INCOME ANALYSIS ($ X 1000)

****

PREV.EQUITY ASSUMED: 0. COMPLTED EQUITY: 0.

TOTAL COST OF PROJ.: 40614. COMPLTED MOR-VAL RTO. 100.00

PERIOD	1	5	10	15	20	25
OPER INCOME	2635.1	3202.9	4087.8	5217.2	6658.6	8498.2
FIRST-AMORT	740.3	934.6	1250.7	1673.7	2239.8	2996.3
INTRST	2436.8	2242.5	1926.4	1503.4	937.3	179.8
DEPRECIATION	1211.9	1057.0	891.1	751.4	633.7	534.6
TAXABLE INC	-1013.7	-96.6	1270.3	2962.4	5087.5	7783.8
TAX BENEFIT	0.0	0.0	0.0	0.0	0.0	0.0
PRETAX C.F.	-542.0	25.8	910.7	2040.1	3481.5	5321.1
C.F.AFT TAX	-542.0	25.8	910.7	2040.1	3481.5	5321.1
RCR (CASH)	0.000	0.000	0.000	0.000	0.000	0.000
RCR(CASH) PARTNER= 1	0.0	0.0	0.0	0.0	0.0	0.0
INC.=F&C PARTNER= 1	2635.1	3202.9	4087.8	5217.2	6658.6	8498.2

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 6.950 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 9.940 %

****

LAND LEASE GRAN2
DATA FOR THIS PART

****

DEVEL.USES	2
NO.OF YEARS	25
YEAR OF SALE	30
% VACANCY	5.00
CAP. RATE	9.80
% RECAP@SALE	0.00
% COMMISSION	5.00
% L.T. INTRS	9.00
LANDCOS.$/SF	30.00
KSF PAR.SIZE	61.00
$ DEMOL.COST	0.00

DEVELOPMENT PROGRAM:

MEDIUM RISE	400000.
STRUCTURED P	560000.

****

LAND LEASE GRAN2 --- LAND LEASE/SALE ANAL.($ X 1000)

****

TOTAL COST OF PROJ.: 1830. (INCL. ACQ.+ CLEAR. ONLY)

PERIOD	1	5	10	15	20	25
LEASE INCOME	867.4	867.4	1146.6	1503.0	1957.7	2538.2
REV AT SALE	10312.0	10312.0	13161.0	16797.0	21437.6	27360.4
TOT TAXES	0.0	0.0	0.0	0.0	0.0	0.0
EXPN OF SALE	515.6	515.6	658.0	839.9	1071.9	1368.0
PROC AFT TAX	9794.6	9796.4	12502.9	15957.2	20365.8	25992.4

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10) 61.550 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25) 58.040 %

****

COMB. TOTAL CASH FLOW ($ X 1000)

****

PERIOD	1	5	10	15	20	25
DEVEL HOLD GRAN2	-542.0	25.8	910.7	2040.1	3481.5	5321.1
LAND LEASE GRAN2	867.4	867.4	1146.6	1503.0	1957.7	2538.2
TAX FIN. GRAN2	48.2	58.5	74.7	95.3	121.7	155.3
ANNUAL CASH FLOW	373.5	951.8	2132.0	3638.4	5560.9	8014.5
ACCUMULATED CASH	373.5	3278.0	12048.2	27828.0	52553.8	88697.3

$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %	0.00	5.00	6.00	7.00	8.00	9.00
PRESENT VALUE $	88697.	40915.	35584.	31103.	27321.	24115.

```
**********************  ***********************************************************
TAX FIN.   GRAN2        TAX FIN.   GRAN2     --- TAXATION ANALYSIS  ( $ X 1000 )
DATA FOR THIS PART
**********************  ***********************************************************

DEVEL.USES          2
NO.OF YEARS        25     PERIOD                 1        5       10       15       20       25

% VACANCY        5.00     TAX BASE TOT     48150.8  58527.4  74697.2  95334.1121672.8155288.1
CAP. RATE        9.00     AD VAL TAXES        48.2     58.5     74.7     95.3    121.7    155.3
LANDCOS.$/SF    30.00
KSF PAR.SIZE   178.00
                          INC TAX BASE     43611.8  53988.4  70158.2  90795.1117133.8150749.1
                          INCR TAXES           0.0      0.0      0.0      0.0      0.0      0.0
% ASSES.RTO.    85.00
ADVAL.TAX RT     0.10
INC.TAX RATE     0.00
IMPR.VALUE $     0.00

DEVELOPMENT PROGRAM:
HIGH RISE AP1280000.
STRUCTURED P 595000.
```

Evanston

STOP CONTEXT

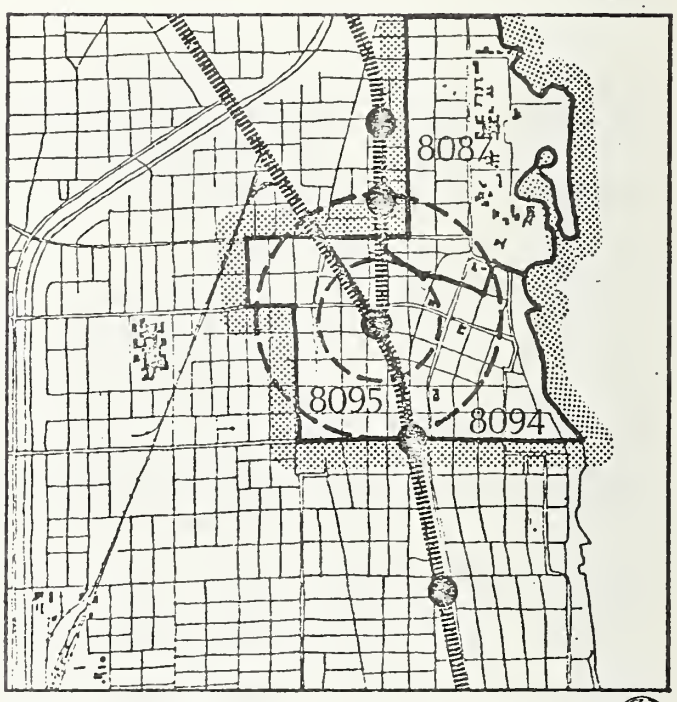
The Evanston CBD stop represents a unique situation in this research. Rapid transit and suburban rail systems are already in the ground, and proposed redevelopment will cause value appreciation in land already held by transit entities.

The stop itself is located near the Central Business District of Evanston. The area is developed, including office, retail and civic facilities as well as facilities related to Northwestern University.

The transit stop provides both public rapid transit and suburban commuter rail service to downtown Chicago, as well as transfer to local bus service. Some Park-and-Ride service is provided. The stop as a whole serves somewhat more as an origin than destination. Both transit lines are elevated above grade, and station facilities are little more than covered platforms.

Improvements have been made and more are planned to upgrade pedestrian and automobile traffic in the area with the result that congestion, safety, and air pollution are not major problems. Noise problems associated with the CTA transit line and C & NW railroad are present due to above grade construction.

In terms of population, the 13,026 full-



EVANSTON STOP CONTEXT Fig. 7/18

time and part-time residents in the area around the Evanston stop are strongly dominated by the Northwestern University population. The 3887 year-round housing units house relatively small households averaging 1.9 persons. 6 percent of the area's residents are minority, the number of elderly people is high at 21.7 percent and the number of children is low at 13.8 percent.

Somewhat higher transiency of residents has been experienced than for the city as a whole, with 37 percent of the population having the same residence in 1970 as in 1960.

The percent of home ownership is lower in two tracts and higher in one than the city average, and the value of homes is more than twice the city average. Rental units are somewhat more common overall than the average, and rents are high. Very few units are vacant (less than 3 percent).

In terms of quality indicators, the Evanston area rated extremely high on education levels, and has few poverty households. Incomes are low, probably due to the very low incomes of the student population. Unemployment rates are about average. Housing is characterized by cost as a percent of income that is somewhat below average for those in the $5-10,000 year income bracket while overcrowding is very low. The low overcrowding is a partial correlate, however, of the overall small household size prevalent in the University community.

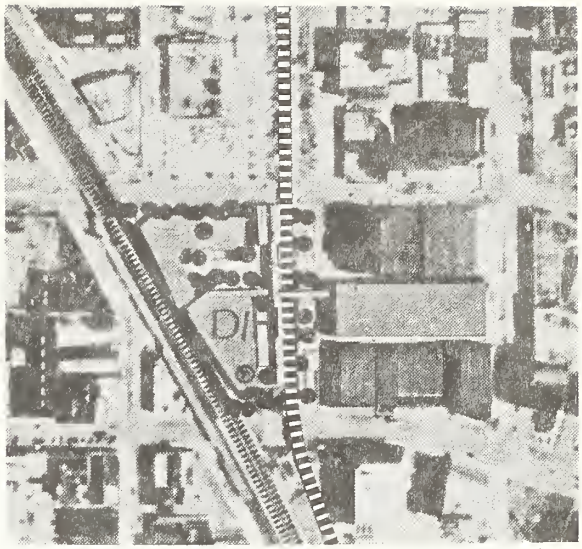
The area around the Evanston stop contains the business, commercial and cultural center of Evanston, as well as residential area, as a result, community enhancement impacts will be felt by employment, shopping and social/cultural visitors to the area, as well as by the residents of the area.

Value appreciation as a result of the transit system has by-and-large already occurred, and has been further enhanced by CBD development. Additional minor appreciation may be generated by upgrading of the transit system but Value Capture alternatives are primarily aimed at capitalizing on past increases. Continuing development of the Evanston central area, together with high transit ridership, generates significant need for parking, and potential markets for specialized commercial facilities related to the transit stop and the proposed performing arts center. Market potential for office and medium density housing is strong.

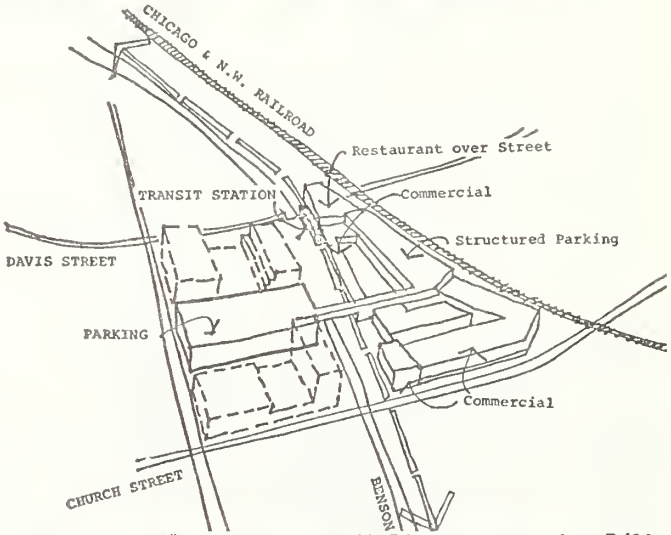
Neither development alternative examined here reflects developments currently proposed in Evanston. (See Section 7c.)

VALUE CAPTURE ALTERNATIVE #1

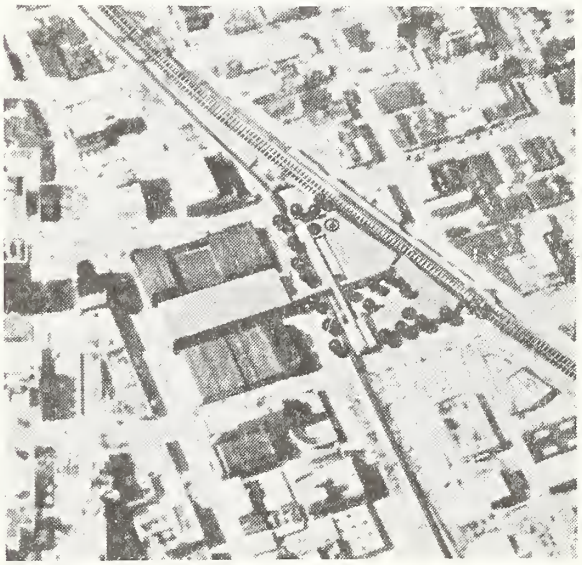
Value Capture techniques in alternative #1 are limited to 122,500 square feet of land in the triangle bounded by Davis, Church and Benson Streets and the C & NW Railway.



ALTERNATIVE #1 PLAN Fig. 7/19



ALTERNATIVE #1 DEVELOPMENT COMPONENTS Fig. 7/20



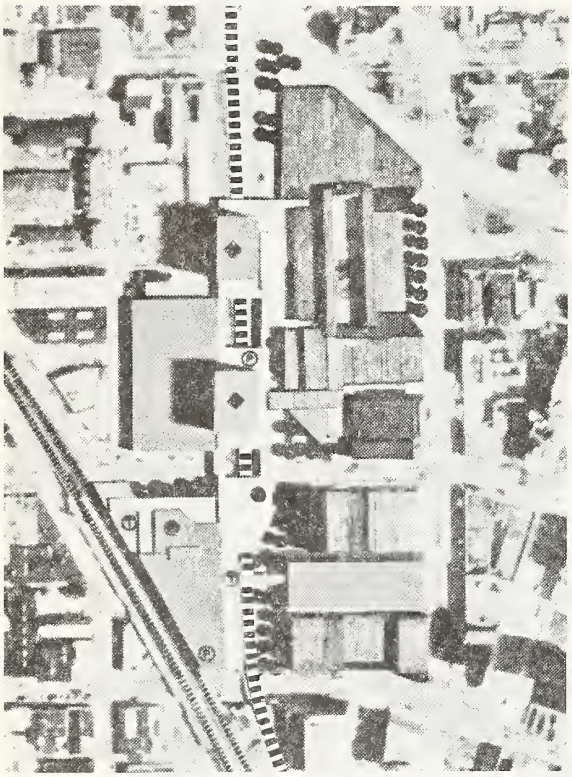
ALTERNATIVE #1 AERIAL VIEW Fig. 7/21

Revenues are realized by participation of the public transit entity, the railway and a private developer in construction of a limited local commercial facility and parking directly related to transit uses. 10% participation in revenues by the public transit entity is established as a share based on land contribution to the project. For cash flow analysis purposes, returns to a transit development entity were calculated as joint participation in develop/hold application. The illustrative facility program includes:

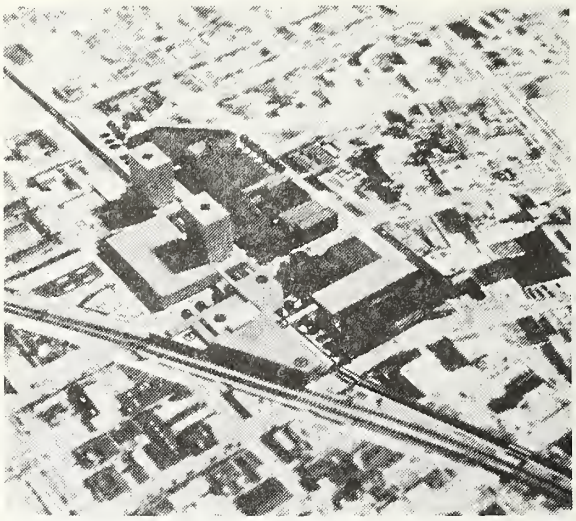
	FACILITY			PARKING			TECHNIQUE
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
Ⓣ	Transit Stop	8,000	2	-	-	-	Joint Participation/Lease
●	Local Commercial	82,000	2	250	Struct.	87,500	Joint Participation/Lease

VALUE CAPTURE ALTERNATIVE #2

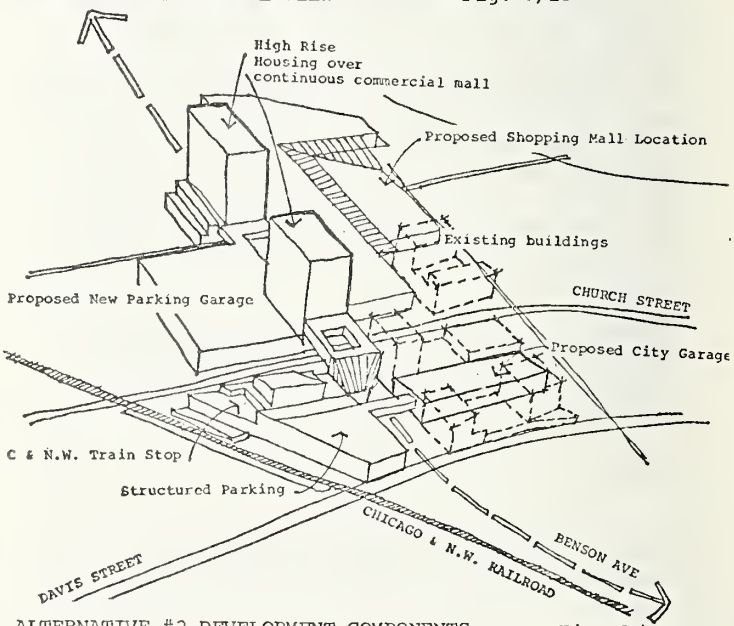
This alternative suggests a more ambitious development proposal covering 184,500 square feet of transit held land, and 12,800 square feet of air rights above public streets. Value Capture techniques are the same as the first alternative, but the public transit entity is credited with a 20% share due to a larger land contribution.



ALTERNATIVE #2 PLAN Fig. 7/22



ALTERNATIVE #2 AERIAL VIEW Fig. 7/23



ALTERNATIVE #2 DEVELOPMENT COMPONENTS Fig. 7/24

Key aspects of the proposal include development of transit and commercial facilities on the same location as alternative #1, but connected above grade to high-rise housing units built above the transit right-of-way north of Church Street. A planned commercial shopping mall east of Benson Street is also illustrated to show its linkage with the proposed housing. The illustrative program includes:

	FACILITY			PARKING			TECHNIQUE
	Type	Square Feet	Stories	Spaces	Type	Square Feet	
Ⓣ	Transit Stop	12,000	2	120	Struct.	42,000	Joint Development/Lease
●	Local Commercial	120,000	3	480	Struct.	168,000	Joint Development/Lease
◆	High-Rise Apartments	360,000	12	300	Struct.	105,000	Joint Development/Lease

COMMUNITY IMPACTS

Value Capture at Evanston affects a large number of groups and constituencies, but the effects are less variable than most situations studied. No residential relocation is proposed and no new housing is developed in alternative #1, so no population changes are expected. In alternative #2, new housing units and residents are added, but are not expected to result in a change in indicators due to the projected similarity of new residents to present residents. Provision of new employment opportunities, particularly in retail commercial facilities, may benefit students and other lower income residents in terms of decreasing unemployment and increasing median income.

Natural environmental impacts are expected to be minor, with some increase in auto related pollution, but some buffering of transit noise by new construction, particularly in alternative #2. The man-made environment should receive a boost from elimination of the current "no man's land" between the transit line and railway; by provision of open space; and by improvement of the pedestrian environment.

Access and mobility are already good, but some improvement is possible due to upgrading of station facilities, providing related uses, and providing additional parking. No new transportation modes are provided.

Minor commercial relocation and new commercial construction will have an effect in redistributing commercial activities. Net gain is more likely, however, from transit improvements, infrastructure improvements, and amenity provisions.

Short-range relocation and construction impacts are important but not overly large. The net gain characteristics mentioned above represent significant long-range gains.

Overall, community enhancement due to Value Capture application in Evanston appears to be good. Minor congestion increases, some business relocation costs, and minor construction impacts seem to be the only costs of benefits received by most segments of the community. The positive benefits may be amplified further by high-quality urban design, programming and design of facilities.

		AREA MEAN	CITY MEAN	CHANGE DUE TO VCP		
				ALT#1	ALT#2	ALT#3
PRIMARY INDICATORS	% Labor Force Unemployed	3.2	3.4	L/B	L/B	
	% Population, 25 or over High School Graduates	84.0	53.9	0	0	
	% Households in Poverty	6.6	10.5	L/B	L/B	
	% of Tract with Air Pollution Problems	NA	NA	H/W	H/W	
	Median Family Income	5541	9889	H/B	H/B	
	Rent as % of Income: $5,000-$9,999 Income	19.9	21.5	0	H/W	
	% of Units with 1.01 Persons per Room or More	1.7	8.2	0	0	
SECONDARY INDICATORS	% of Tract with Water Pollution Problems	NA	NA	0	0	
	% of Tract with Noise Pollution Problems	NA	NA	L/B	L/B	
	% of Tract without Pollution	NA	NA	0	0	
	% of Households with no Auto	27.2	23.2	0	L/-	
	Median School Years Completed, 1970	14.9	12.1	0	0	

COMMUNITY IMPACT INDICATORS Fig. 7/25

```
****************************
DEVEL HOLD EVAN1
DATA FOR THIS PART
****************************

DEVEL.USES          3
NO.OF YEARS        25
NO.OF PARTNR        3
YEAR OF SALE       30

% VACANCY        5.00
CAP. RATE        9.80
MORT:VAL.RTO    80.00
MTG.TERM        25.00
% L.T. INTRS     9.00
% RECAP@SALE   100.00
% COMMISSION     5.00
$EQUITY PAID  2000.00
LANDCOS.$/SF     0.00
KSF PAR.SIZE   122.50
$ DEMOL.COST    20.00

FOR EACH PARTNER:

PARTNER NO.         1
% SHARE         10.00
% INCOME TAX     0.00
% CAP.GAINS      0.00

PARTNER NO.         2
% SHARE         30.00
% INCOME TAX     0.00
% CAP.GAINS      0.00

PARTNER NO.         3
% SHARE         60.00
% INCOME TAX    50.00
% CAP.GAINS     50.00

DEVELOPMENT PROGRAM:

PUBLIC INST1    6000.
STRUCTURED P   87500.
NEIGHBORHD C   82000.
```

```
*****************************************************************
DEVEL HOLD EVAN1      ---   INCOME ANALYSIS    ( $ X 1000 )
*****************************************************************

PREV.EQUITY ASSUMED:      2000.  COMPUTED EQUITY:          260.
TOTAL COST OF PROJ.:      4725.  COMPUTED MOR-VAL RTO.      80.00

PERIOD                  1       5      10      15      20      25

OPER INCOME           546.9   664.8   848.4  1082.8  1382.0  1763.8

FIRST-AMORT            52.7    74.4   114.5   176.1   271.0   416.9
      INTRST          401.8   380.1   340.0   278.4   183.5    37.5

DEPRECIATION          152.1   133.1   112.8    95.6    81.1    68.7
TAXABLE INC            -7.0   151.5   395.6   708.9  1117.5  1657.6
TAX BENEFIT            -2.1    45.5   118.7   212.7   335.2   497.3
PRETAX C.F.            92.4   210.2   393.9   628.3   927.5  1309.3
C.F.AFT TAX            94.5   164.8   275.2   415.7   592.2   812.0

ROR (CASH)           35.508  80.804 151.391 241.479 356.456 503.198

ROR(CASH)
  PARTNER-     1     35.5    80.8   151.4   241.5   356.5   503.2
  PARTNER-     2     35.5    80.8   151.4   241.5   356.5   503.2
  PARTNER-     3     35.5    80.8   151.4   241.5   356.5   503.2

INC.-F&C
  PARTNER-     1     54.7    66.5    84.8   108.3   138.2   176.4
  PARTNER-     2    164.1   199.4   254.5   324.9   414.6   529.1
  PARTNER-     3    328.1   398.9   509.1   649.7   829.2  1058.3


INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10)  12.410 %
INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25)  16.320 %


*****************************************************************
COMB. TOTAL CASH FLOW ($ X 1000)
*****************************************************************


PERIOD                  1       5      10      15      20      25

DEVEL HOLD EVAN1        9.2    21.0    39.4    62.8    92.7   130.9

ANNUAL CASH FLOW        9.2    21.0    39.4    62.8    92.7   130.9
ACCUMULATED CASH        9.2    74.9   233.4   498.4   899.4  1473.9


$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %        0.00    5.00    6.00    7.00    8.00    9.00
PRESENT VALUE $       1474.    695.    607.    534.    471.    418.
```

```
****************************
DEVEL HOLD EVAN2
DATA FOR THIS PART
****************************

DEVEL.USES          4
NO.OF YEARS        25
NO.OF PARTNR        3
YEAR OF SALE       30

% VACANCY        5.00
CAP. RATE        9.80
MORT:VAL.RTO    80.00
MTG.TERM        25.00
% L.T. INTRS     9.00
% RECAP@SALE   100.00
% COMMISSION     5.00
$EQUITY PAID  4500.00
LANDCOS.$/SF     0.00
KSF PAR.SIZE   184.50
$ DEMOL.COST    20.00

FOR EACH PARTNER:

PARTNER NO.         1
% SHARE         20.00
% INCOME TAX     0.00
% CAP.GAINS      0.00

PARTNER NO.         2
% SHARE         20.00
% INCOME TAX     0.00
% CAP.GAINS      0.00

PARTNER NO.         3
% SHARE         60.00
% INCOME TAX    50.00
% CAP.GAINS     50.00

DEVELOPMENT PROGRAM:

PUBLIC INSTI   12000.
HIGH RISE AP  360000.
COMMUNITY CC  120000.
STRUCTURED P  315000.
```

```
*****************************************************************
DEVEL HOLD EVAN2      ---  INCOME ANALYSIS    ( $ X 1000 )
*****************************************************************

PREV.EQUITY ASSUMED:      4500.  COMPUTED EQUITY:          2740.
TOTAL COST OF PROJ.:     21923.  COMPUTED MOR-VAL RTO.      80.00

PERIOD                  1        5       10       15       20       25

OPER INCOME        2349.9   2856.3   3645.5   4652.7   5938.1   7578.6

FIRST-AMORT         226.5    319.7    491.9    756.9   1164.5   1791.0
      INTRST       1726.5   1633.3   1461.1   1196.1    738.4    161.2

DEPRECIATION        863.9    773.5    668.2    570.3    478.5    391.8
TAXABLE INC        -240.5    449.6   1516.3   2886.3   4671.2   7025.6
TAX BENEFIT         -72.1    134.9    454.9    865.9   1401.3   2107.7
PRETAX C.F.         397.0    903.4   1692.5   2699.7   3985.1   5625.7
C.F.AFT TAX         469.1    768.5   1237.7   1833.8   2583.8   3518.0

ROR (CASH)         14.487   32.967   61.766   98.520  145.430  205.299

ROR(CASH)
  PARTNER-    1     14.5     33.0     61.8     98.5    145.4    205.3
  PARTNER-    2     14.5     33.0     61.8     98.5    145.4    205.3
  PARTNER-    3     14.5     33.0     61.8     98.5    145.4    205.3

INC.-F&C
  PARTNER-    1    470.0    571.3    729.1    930.5   1187.6   1515.7
  PARTNER-    2    470.0    571.3    729.1    930.5   1187.6   1515.7
  PARTNER-    3   1410.0   1713.8   2187.3   2791.6   3562.8   4547.2


INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 10)  10.870 %

INTERNAL RATE OF RETURN: (PROJ.TERM. AT YEAR 25)  15.260 %


*****************************************************************
COMB. TOTAL CASH FLOW ($ X 1000)
*****************************************************************


PERIOD                  1        5       10       15       20       25

DEVEL HOLD EVAN2       79.4    180.7    338.5    539.9    797.0   1125.1

ANNUAL CASH FLOW       79.4    180.7    338.5    539.9    797.0   1125.1
ACCUMULATED CASH       79.4    644.0   2005.5   4282.7   7728.6  12666.0


$NET PRESENT VALUE OF DEVELOPMENT PROJECT:

DISCOUNT RATE %        0.00     5.00     6.00     7.00     8.00     9.00
PRESENT VALUE $      12666.    5969.    5218.    4585.    4050.    3596.
```

Notes

1. American Bechtel, Inc., Environmental Impact Analysis - CCATP, (Chicago, CUTD, 1974).

2. Chicago Urban Transportation District, (CUTD) Annual Report 1974, (Chicago, 1975).

3. CUTD, op. cit.

4. Ch. 24 §§ 11-117-1 et. seq., and 11-122-1.

5. Poole v. City of Kankekee, 406 Ill. 521 (1950).

6. Ibid., at 529.

7. Ibid., at 527.

8. People ex rel Adamowski v. Chicago Railroad Terminal Authority, 14 Ill. 2d, 230 (1958).

9. Ibid., at pp. 235-36.

10. People ex rel City of Salem v. McMackin, 53 Ill. 2d, 347 (1972), Ill. Rev. Stat. 1971 Ch. 24, 11-74-1 et. seq.

11. Ibid., at pp. 354-55.

12. 1973 Ill. Rev. Stat. (1974 Supp), Ch. 24, §§ 11-74.2-1 et. seq.

13. People ex rel City of Urbana v. Paley, (1975).

14. City of Waukegan v. Stanczak, 129 N.E. 2d 751 (1955).

15. Chicago Transit Authority Ordinance (passed April 23, 1945).

16. Chicago Transit Authority Real Estate Practices and Procedures, Claims Law/ Real Estate Development, Real Estate Section (March, 1975).

17. Ibid., at p. 29.

18. Ibid., at p. 31.

19. Ch. 121, § 4-501.

20. Ibid., i.e., to Oscar Meyer for passegeways across CTA property (under/over) to building on either side.

21. Ibid.

22. Ill. Rev. Stat., Ch. 105, §333.15 (1973)

23. Ill. Rev. Stat., Ch. 105, §9.3-1-9.3-2.

24. Ill. Rev. Stat., Ch 121, §4-501.

25. Ibid., §2-202.

26. Ibid., §9-1131.

27. Ibid., §314a26 et. seq.

28. Ibid., §314a34.

29. Standard Oil -- Illinois Toll Commission -- lease dated 20 December 1957.

30. Ill. Rev. Stat. Ch. 24, § 11-74.2-1 et. seq.

31. Article VII, §10.

32. Chicago Transit Authority, Proposed 1975 Budget, December 19, 1974.

33. Ibid.

34. Ibid.

35. CUTD, op. cit.

36. Chicago Tribune, August 13, 1975 at page 2.

37. Chicago Transit Authority (CTA), Annual Report, 1973.

38. Urban Transportation District Act, State of Illinois, Ch. $111^2/3$, §501-550, Public Utilities Code.

39. CUTD, op. cit.

40. Ibid.

41. CTA, Proposed 1975 Budget, op. cit.

42. Section 11. Lease, Sale or Other Disposition of Property.

    The Grantee may lease, sell or otherwise dispose of any property in its property accounts which is no longer necessary, appropriate, or adapted to the proper operation and maintenance of the Transit System.

    Any property so sold or disposed of shall be removed from the property accounts of the Grantee.

    The net rental or net income arising from the leasing of any property in the property accounts of the Grantee shall con-

stitute and be part of the gross revenues of the Grantee but only so long as such property is used or useful as operating transportation property.

43. CTA, Annual Report, 1973.

44. Yeates, M.H., "Some Factors Affecting the Spatial Distribution of Chicago Land Values, 1910-1960", Economic Geography, January, 1965.

45. CTA, Proposed 1975 Budget, op. cit.

46. Evanston Planning Commission Minutes, March 5, 1975.

47. CUTD, op. cit.

48. CUTD, op. cit.

49. Urban Transportation District Act, Section 513, op. cit.

50. CTA, Annual Report 1973, p. 7.

51. Ibid.

52. CUTD, Final Report, CCATP, (Chicago, 1974).

53. Ibid.

54. CUTD, Architectural Station Concepts - Distributor Line, (Draft, 27 February 1974).

55. Bechtel, op. cit.

56. CUTD, Final Report, op. cit.

57. Ibid.

* U.S. GOVERNMENT PRINTING OFFICE : 1977 0-730-315/1570

REQUEST FOR FEEDBACK TO
The DOT Program Of University Research

DOT-TST-77-72

YES	NO	
☐	☐	Did you find the report useful for your particular needs? If so, how?
☐	☐	Did you find the research to be of high quality?
☐	☐	Were the results of the research communicated effectively by this report?
☐	☐	Do you think this report will be valuable to workers in the field of transportation represented by the subject area of the research?
☐	☐	Are there one or more areas of the report which need strengthening? Which areas?
☐	☐	Would you be interested in receiving further reports in this area of research? If so, fill out form on other side.

Please furnish in the space below any comments you may have concerning the report. We are particularly interested in further elaboration of the above questions.

Cut Out Along This Line

COMMENTS

Thank you for your cooperation. No postage necessary if mailed in the U.S.A.
FOLD ON TWO LINES, STAPLE AND MAIL.

RESEARCH FEEDBACK

Your comments, please . . .

This booklet was published by the DOT Program of University Research and is intended to serve as a reference source for transportation analysts, planners, and operators. Your comments on the other side of this form will be reviewed by the persons responsible for writing and publishing this material. Feedback is extremely important in improving the quality of research results, the transfer of research information, and the communication link between the researcher and the user.

Fold Fold

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE SECRETARY
Washington, D.C. 20590

Official Business

PENALTY FOR PRIVATE USE, $300

POSTAGE AND FEES PAID
DEPARTMENT OF
TRANSPORTATION
DOT 518

U.S.MAIL

Office of University Research
Office of the Secretary (TST-60)
U.S. Department of Transportation
400 Seventh Street, S.W.
Washington, D.C. 20590

Fold Fold

IF YOU WISH TO BE ADDED TO THE MAIL LIST FOR FUTURE REPORTS, PLEASE FILL OUT THIS FORM.

Name _____ Title _____
Use Block Letters or Type

Department/Office/Room _____

Organization _____

Street Address _____

City _____ State _____ Zip _____

HE 18.5
.A39
no.DOT-TST-
77-72
c.2
DUPL.

U.

BORROWER

Form DOT F 172
FORMERLY FORM DO

DOT LIBRARY
00011593